CLIPSAL

# HomeSafe Security Panel

## Installation and Programming Manual

**5400 & 5400/16CB**

## CONTENTS


**INSTALLATION**

Installation notes ..... 4
Inputs and outputs ..... 5
CONNECTION DIAGRAM ..... 6
Wiring examples ..... 7
keypad ..... 9
Operation
Operation summary ..... 10

**HOW TO PROGRAM**

Quick start programming ..... 11
How to enter program mode ..... 12
Program mode levels ..... 10

**PROGRAMMING OPTIONS**

user codes ..... 13
Timers ..... 15
Vibration sensitivity ..... 16
zone assignment ..... 17
day zones, temporary day zones ..... 19
temporary day zones operation ..... 19
temporary day zones operation summary ..... 10
area partitioning ..... 19
zone to output mapping ..... 21
Various options ..... 23
tamper/keypad panic output mapping ..... 25
System operation shortcuts ..... 26
monitor mode output mapping ..... 27
Day mode output mapping ..... 27
Miscellaneous options ..... 26
radio supervision options ..... 30
Misc. Options 1 ..... 30

**DIALLER OPTIONS**

TELEPHONE NUMBERS ..... 37
Account numbers ..... 37
Report zone alarms ..... 39
Report zone restorals ..... 39
Report multiple zone alarms ..... 39
Account No.2 zones ..... 39
Report miscellaneous alarms ..... 40
Report miscellaneous restorals ..... 38
Test call options ..... 41
Dialler format options ..... 41
CONTACT ID REPORTING codes ..... 42
Dialling options ..... 42
area1, area 2 open/close reports ..... 45
Siren chirp, flash options ..... 45
Other reports ..... 44
TEST CALL OPTIONS ..... 47
Mains report delay ..... 47
Listen-in to dialler ..... 47
Swinger shutdown ..... 48
Line fault monitor ..... 48
Line Fault to AUX2 ..... 48
remote access options ..... 49
Required rings ..... 51
No memory warning zones ..... 51

**SPECIAL FUNCTIONS**

Send test report ..... 51
Siren test ..... 51
Panel reset ..... 51
Display software version ..... 51

**FACTORY DEFAULTS**

Clear radio devices ..... 52
Clear memory ..... 52
Clear panel options ..... 52
Clear user codes ..... 52

**OUTPUT EXPANDE**

Output expander options ..... 53
Enable latching keyswitch ..... 55
monitor arm chirps by radio key ..... 55
radio key AUX button arms monitor mode ..... 52
keyswitch arms only / disarms only ..... 52

**AUX OUTPUTS**

AUX1 output options ..... 56
AUX2 output options ..... 57
AUX3 output options ..... 58
AUX4 output options ..... 59
Enable/disable hardwire zones ..... 59

**RADIO OPTIONS**

radio quick start ..... 60
radio interface ..... 60
Signal strength meter ..... 59
radio devices, described ..... 60
radio supervision, defined ..... 60
radio device programming ..... 61
radio key programming ..... 62
Real time clock options ..... 64

**ACCESS CONTROL OPTIONS**

access control options ..... 63

**REMOTE OPERATION**

monitoring operation ..... 65
remote operation by telephone ..... 66
Features, specifications, compliances ..... 67

PROGRAMMING OPTIONS SUMMARY ..... 71

Installation record ..... 74

## FEATURES

- 8 or 16 alarm zones.
- Supports up to 3 remote LCD or LED keypads.
- 56 user codes can be programmed to operate by keypad PIN, radio key or access card.
- Optional Clipsal radio interface for fully integrated wireless security.
- Programmable 2 area partitioning can split the panel into two independent areas plus a common area.
- monitor mode allows partial arming, (eg, perimeter security overnight).
- Day mode feature allows daytime monitoring of fire doors, coolrooms etc.
- temporary day zone feature allows easy enabling/disabling of Day mode.
- keypad Panic feature.
- keypad Duress feature.
- Two button arming feature.
- Fire alarm feature with different siren tones.
- Highly flexible zone to output mapping.
- Onboard Vibration Sensor analyser with programmable sensitivity.
- Siren chirp and strobe flash on arming with radio key.
- Quiet chirps option on arm/disarm by radio key.
- True Dynamic Battery Test actively tests the battery under load every hour.
- 4 programmable auxiliary outputs.
- Automatic reset fuses.
- Programmable siren/reset lockout.
- 30 event memory from keypad.
- Standard defaults to suit most applications.
- Easy programming by keypad or 5400/S2 software.
- All programming data is permanently stored in a non-volatile memory.
- All inputs and outputs are heavily protected against lightning and high voltage supply transients.
- Optional output expander.
- C-Bus enabled (5400/16CB only).

DIALLER

- Full remote upload/download by PC and modem using 5400S/2 software.
- remote control of outputs via telephone.
- Contact ID Format - two 14 digit phone numbers plus one “‘follow me’” number.
- audible format feature.
- Phone line monitoring (activates output).
- Dialler ‘listen in’ option for installers.
- Auto test calls.
- Pulse or DTMF dialling.
- True dial tone detection.
- HEX programmable client codes.

# CLIPSAL 5400 & 5400/16CB CONTROL PANELS

**5400 V2 JUNE 2005**

- All user codes are now allocated to area 1 by default. User codes can be allocated to area 2 as required.
- area 2 only user codes do not turn off monitor mode. Previously any user code would disarm monitor mode. This allows area 2 to be armed/disarmed without affecting monitor arming.
- New option P66E 5E enables wired zone supervision. Useful as an “Inactivity monitor”. See page 32.
- radio zones will reseal in the presence of high frequency radio interference.

**5400 V5 NOVEMBER 2005**

- The number of user codes has been increased to 56.
- New method of programming user codes for easier assignment of options to user codes. Each user code can be assigned to: Area1, area2, code only arming, arm only, keypad code, radio code, access code reader1, 2 or 3.
- Automatic Memory mode exit after 4 minutes without a keypress. (Same as user program mode and exclude mode).
- monitor mode can now be armed when area 2 is armed. (monitor mode is still unavailable when area1 is armed).
- The keyswitch input can now use a latching, (2 position), keyswitch or momentary action keyswitch.
- keyswitch input can also be programmed to arm only or disarm only.
- Siren can be enabled to chirp when monitor arming with a radio key, (as well as chirp when full arming with a radio key).
- arming of monitor mode with the AUX button on a 5404BP radio key.
- monitor mode alarms are mapped to Reset and strobe outputs by default.
- Real time clock onboard with programmable minutes, hours, day, month, year, day of week.
- Any zone can be a long response zone with an input delay of 1 sec or 3 sec. (Replaces vibration sensitivities 7 and 8).
- Vibration sensitivity settings are now 6 levels per zone, previously 8.
- New “enable hardwire zones” option allows zone inputs to be disabled if unused.
- New AUX output functions. AUX, 1, 2, 3 and 4 can be individually programmed to perform one of many functions such as zone alarm output, zone supervision alarm output, radio key output (pulse or toggle), telephone remote control and access control output.
- New SERIAL port for connection to future accessories.
- Fast up/download from PC by direct connect to the panel’s serial port. (In installer program mode).
- Option to allow the panel to answer incoming phone calls in either First call or second call modes.
- New access control features including a reader input for connection of up to 3 access control proximity weigand readers, (supplied with reader).
- Each access control reader’s output can be programmed to any AUX output for powering of electric door locks and other accessories.
- zones 5, 6 and 7 can be converted into request to exit (REX) inputs for access control purposes.
- Up to 55 user codes can be programmed as access codes to allow arming and disarming using proximity access cards or fobs.
- New LISTEN pins on the main board allows the installer to listen-in to dialler tones for diagnostic purposes. (Dialler listen-in via the siren output is also available.)
- New main board design using a faster new microprocessor with flash memory and enhanced RAM and EEPROM capacity.
- New 5200/S2 software for easier remote programming with fast up/download.
- Even more events saved in memory for access by 5200/S2.
- New polycarbonate housing with ample provision for the main board, slide-in accessory boards and backup battery.
- New “slide fit” accessory boards with removable terminal blocks:
  5400EX8 output expander provides multiple outputs for various alarms and user codes.
  5400/4R Relay output board provides 4 x c/o relays for door strikes etc.

**5400/16CB V1 AUGUST 2005**

- C-Bus interface allowing 16 security events to be mapped to a C-Bus network.
- 16 zone panel added to range.
- Combined installation and user manuals for both 5400 & 5400/16CB.
- The 5400/16CB now has 16 physical zone inputs using 2K2 resistors. Zone split is still available as a programmable option. If zone split is enabled, all 16 zones wire into physical inputs 1-8 using 2K2 and 4K7 resistors and physical zone inputs 9-16 are no longer used.

## NEW FEATURES

### 5400 Version

- C-Bus interface board supplied with 5400/16CB panel.
- The number of user codes has been increased to 56.
- New method of programming user codes permits easier assignment of options to user codes. Each user code can be assigned to: Area 1, area 2, arm only, keypad code, radio code, access code reader 1, 2 or 3.
- Automatic memory mode exit after 4 minutes without a keypress. (As per user program mode and exclude mode.)
- monitor mode can now be armed when area2 is armed. (onitor mode is still unavailable when area1 is armed).
- The keyswitch input can now use a latching, (2 position), keyswitch or momentary action keyswitch.
- keyswitch input can also be programmed to arm Only or disarm Only.
- Siren can be enabled to chirp when monitor arming with a radio key.
- arming of monitor mode with the AUX button on a radio key.
- monitor mode defaults sounds RESET and STROBE outputs by default.
- Real time clock onboard with programmable Minutes, Hours, Day, Month, Year, Day Of Week.
- Any zone can be a Long Response zone, with input delay of 1 sec or 3 sec. (Replaces vibration sensitivities 7 & 8).
- Vibration sensitivity settings are now 6 levels per zone, previously 8.
- New "Enable Hardwire zones" option allows zone inputs to disabled if unused.
- The output expander is now also an option for the 5400 control panel.
- New AUX output functions. AUX1, 2, 3 and 4 can be individually programmed to perform one of many functions such as zone alarm output, zone supervision alarm output, radio key output (Pulse or Toggle), Telephone remote Control and access control output.
- New SERIAL port for connection to future accessories.
- Fast up/download from PC by direct connect to the panel's serial port. (installer Program mode only).
- Option to allow the panel to answer incoming phone calls in either first call or second call modes.
- New access control features including a reader input for connection of up to 3 access control proximity readers.
- Each access control reader's output can be programmed to any AUX output for powering of electric door locks and other accessories.
- zones 5, 6 and 7 can be converted into request to exit (REX) inputs for access control purposes.
- Up to 55 access cards can be programmed as user codes. The panel can also be armed and disarmed using access cards.
- New LISTEN pins on the main board allows the installer to listen-in to dialler tones for diagnostic purposes. (Dialler listen-in via the Siren output is also available).
- New main board design using a faster new microprocessor with flash memory and enhanced RAM and EEPROM capacity.
- New software for easier remote programming with fast up/download.
- Even more events saved in memory for access by the software.
- New polycarbonate housing with ample provision for the main board, slide-in accessory boards and backup battery.

**PACKING LIST**

1 5400 main board or 5400/16CB
1 Housing
1 LCD keypad
1 17VAC plug pack
1 12V 7Ah battery (optional)
1 Dialler telephone lead
1 user manual
1 installer manual
8 2.2K End of line resistors or 16 width 16 zone panel
1 Lead assembly for battery
1 Lead assembly for internal tamper
1 tamper bracket
1 zone list label
2 Housing cover screws
4 Circuit board standoff
1 5400/16CB will contain C-Bus SIM and mounting sliders and connection cable.

## SPECIFICATIONS

Box dimensions ..... 235w x 300h x 90d mm
Plug pack..... 240V a.c., output 17V a.c.@1.4A
Power supply ..... 13.8V DC @ 800mA
Quiescent current draw ... 80mA with 1 keypad
Operating voltage ..... 9.5V– 14V d.c.
Rechargeable battery ..... 12 volt 7.0 Amp/hour, lead acid
Battery charging current .. 350mA maximum, current limited
Dynamic battery test..... Every hour and on arming 10.75V with a 5 Amp load
Fuses..... 2 Amp auto resetting / siren output and reset output
500mA auto resetting / 12 volt auxiliary outputs
200 mA auto resetting / strobe output
**INPUTS** ..... 8 or 16 zone input (5400/16CB). 2 x 24hr tamper inputs
End of line resistor..... 2.2K
Maximum keypads..... 3
RADIO Header ..... Multi-pin connector for the Clipsal radio Interface (5400RF)
SERIAL Header..... Serial data port for direct connect programming using Clipsal 5400/S2 software.

**OUTPUTS**

Siren ..... On board siren driver. Timed output
Maximum 3 x 8 Ohm horn speakers
strobe..... 12V d.c. timed output. Maximum 2 x 1 Watt strobe lights
Reset ..... 12V d.c. timed output. Maximum 3 x 12V piezo screamers
Equipment power output.. 13.8V d.c. output for powering detectors and other equipment
Maximum 500mA
AUX header ..... Multi-pin connector provides outputs AUX1, AUX2, AUX3, AUX4, 12V d.c.
reader header..... Multi-pin port for connecting up to 3 proximity access card readers.

## APPROVALS

**EMC COMPLIANCE**

EN 50130-4:1996 Part 4: Electromagnetic compatability. Electrostatic Discharge, Radiated RF Immunity, Electrical Fast Transient/burst. Surge Immunity, Conducted RF Immunity, Voltage Dips and Interruptions, Mains Supply Variations.

AS/NZ CISPR 22:2002- Class B, Electromagnetic Radiation, Terminal Disturbance Voltage.

EN61000-6-3:2001, Harmonic Current Emissions, Voltage fluctuations and Flicker.

**TELECOM**

TBR21, EU. PTC200, NEW ZEALAND TELECOM. AS ACIF S002, AUSTRALIA

**SAFETY**

EN60950:2000 inc Country Deviations, Safety of Information Technology Equipment

AS/NZ3260-1993 incl. AMDTS 1,2,3 &4. TS001-1997 ACA Australian Communications Authority.

N55

**WARNING**

**THIS EQUIPMENT MUST ONLY BE INSTALLED AND MAINTAINED BY SERVICE PERSONNEL.**

**ESD WARNING**

(Electrostatic Discharge).

Once properly installed, Clipsal control panels are well protected from ESD. However, take note of the following precautions during installation.

The human body can generate static electricity when it is insulated from earth - for instance by walking over carpet.

ESD occurs (and a small shock is sometimes felt) if an earthed metal object is then touched.

The installer should be aware that if static electricity discharges into the internal components on the main 5400 circuit board or the keypad board while installing the panel, then ESD damage may occur.

The circuit board should not be unwrapped until it is actually ready to be installed.

Methods to avoid electrostatic build-up:

1. Use a foot strap, a wrist strap, or a grounding mat. The aim is to connect the body to earth to discharge static before it builds up. The connection is a high resistance for personnel safety.
2. If the above is not available, it is advisable to wear clothing that will minimise the build-up of static.
3. Handle circuit boards by the edges. Avoid touching any components on the board as the integrated circuits, in particular, are not guaranteed by their manufacturers to be safe from ESD.
4. To minimise the build-up of static, avoid walking around as much as possible while working on the installation.
5. Touch an earthed object to discharge any static before working on the installation.

**RADIO RECEPTION**

In cases where radio reception needs to be improved, the optional radio interface can be installed up to 50 metres away from the control panel. Use 14/0.20 SHIELDED cable or equivalent.

The shield can either be connected to the EARTH terminal or left unconnected. Leave the shield unconnected at the receiver end.

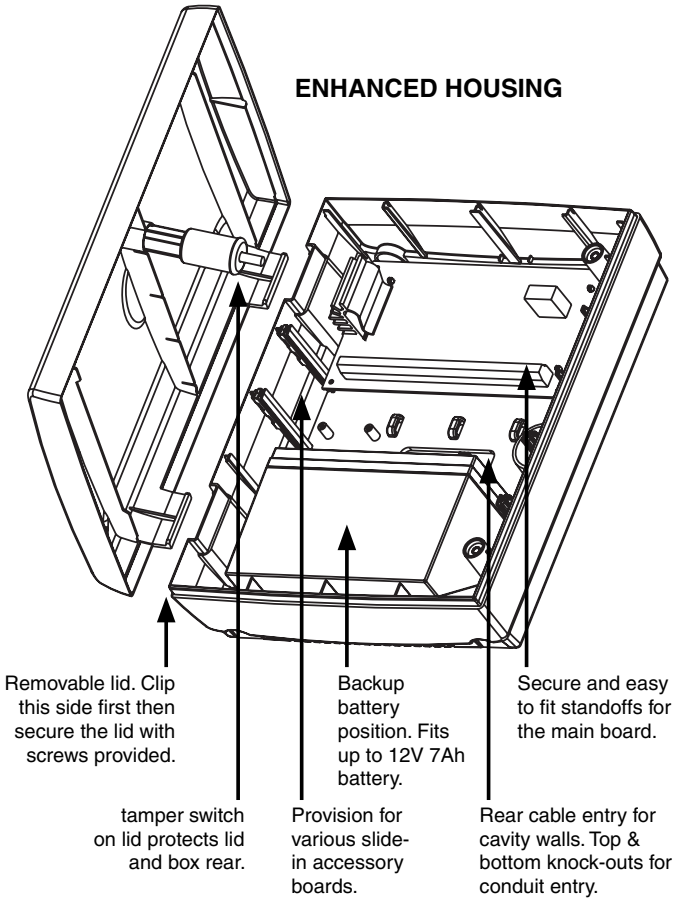
**INSTALLATION PROCEDURES**

The location of the main panel housing and all keypads should be in an area that is within the protected area of the premises. A linen closet or cupboard are good examples as these are generally located in the centre of the premises.

Positioning of the movement detectors should be considered as the incorrect position may cause unwanted alarms.

1. Remove the housing lid.
2. Remove the battery from the base.
3. Securely mount the rear panel housing to a secure location.
4. Run all cabling needed for the installation.
5. Before removing the circuit board from its protective wrapping.
6. Insert the PCB stand-offs in the panel and then plug the circuit board onto the stand-offs.
7. Wire to the circuit board terminal blocks, as per the wiring instructions shown in this installation manual.
8. Replace the battery.
9. Insert the panel tamper bracket as shown below.
10. Close the lid and program the panel as required.

**ENHANCED HOUSING**


Removable lid. Clip this side first then secure the lid with screws provided.
Backup battery position. Fits up to 12V 7Ah battery.
Secure and easy to fit standoffs for the main board.
tamper switch on lid protects lid and box rear.
Provision for various slide-in accessory boards.
Rear cable entry for cavity walls. Top & bottom knock-outs for conduit entry.

## INPUTS

### MONITORED ZONES

The CLIPSAL 5400 has multiple monitored inputs.

8 or 16 fully programmable zone inputs. (monitored by end of line resistor.)
1 x 24 hour External TAMP input. (monitored by end of line resistor.)

1 x 24 hour box tamper input. (Normally Closed input. Resistor is not required.)

### ZONE INPUTS

Each zone input must be terminated with a 2K2 (2200 ohm) resistor or 2K2 and 4K2 (5400/16CB) as supplied. All inputs must be sealed with an EOL resistor unless disabled by option P125E.

For wiring details of keypads, keyswitches, panic buttons and warning devices, see the wiring diagrams in the wiring section of this manual.

### TAMP – tamper Input

The TAMP input must also be sealed with a 2K2 end of line resistor. This input is always a 24hr input.

### AC INPUT TERMINALS

These terminals are for the connection of the plugpack. The 5400 requires an a.c. transformer rating of 1.4 Amps @ 17 V a.c. minimum.

### BATTERY

These terminals are for the connection of a sealed lead-acid rechargeable 12 Volt battery. Charge current is limited to 350mA. The charge voltage is factory preset at 13.8V and does not need changing. Note: A 12 Volt sealed lead acid rechargeable battery must be connected for correct panel operation. Observe correct polarity when connecting the battery.

### EARTH

For maximum protection against damage caused by lightning strikes, connect a good earth to this terminal. Alternatively use the earth lead from the plug pack.

### PROG/TAMP – Program Link & Internal tamper Input

The PROG/TAMP link appears on the two pin J1 header.

The PROG/TAMP link has two purposes:

1. **To enter installer Program mode on initial power up**. Power-up with the PROG link OFF. The PROG link (or Box tamper lead) must be ON in operating mode.
2. **Box tamper**. When used with the internal tamper lead (supplied), PROG/TAMP serves as the 24hr tamper input for the panel's internal tamper switch.

Replace the PROG Link with the Box tamper Lead. Connect the Internal tamper Lead spade terminals directly to the terminals of the internal tamper switch (supplied). An end-of-line resistor is NOT required on this input.

When PROG/TAMP is used for Internal tamper, powering up with the panel's cover open will enter installer Program mode.

## OUTPUTS

### 12 VOLT OUTPUT

A regulated 13.8 V d.c. output is available to power detectors and other equipment. This output is available from two sets of terminals marked +12V and 0V. This output is protected by an automatic reset fuse.

A maximum load of 500mA may be connected to these terminals.

### SIREN

The on-board siren driver will drive a maximum of 3 x 8 ohm horn speakers. The output will reset at the end of siren time (P29E) or whenever the panel is reset, whichever comes first.

This output is protected by an automatic reset fuse.

### STR

A latched 12VDC output for connecting strobe lights.

This output will reset after 72 hours (3 days) or when the panel is disarmed. (5400 versions prior to V4.5 allow indefinite strobe operation, until the panel is reset.)

A maximum of 2 x 1 Watt strobes can be connected to this output.

This output is protected by an automatic reset fuse.

### RESET

A 12V d.c. output for connecting piezo sirens or relays, etc. This output will reset at the end of siren time (P29E) or whenever the panel is reset, whichever comes first.

A maximum of 3 x 12V Piezo screamers or 2 x Piezo can be connected to this output.

This output is protected by an automatic reset fuse.

### AUX HEADER

The AUX outputs are open collector outputs (switch negative) which can supply a maximum of 100mA. Each AUX output can be programmed to perform one of several different functions.

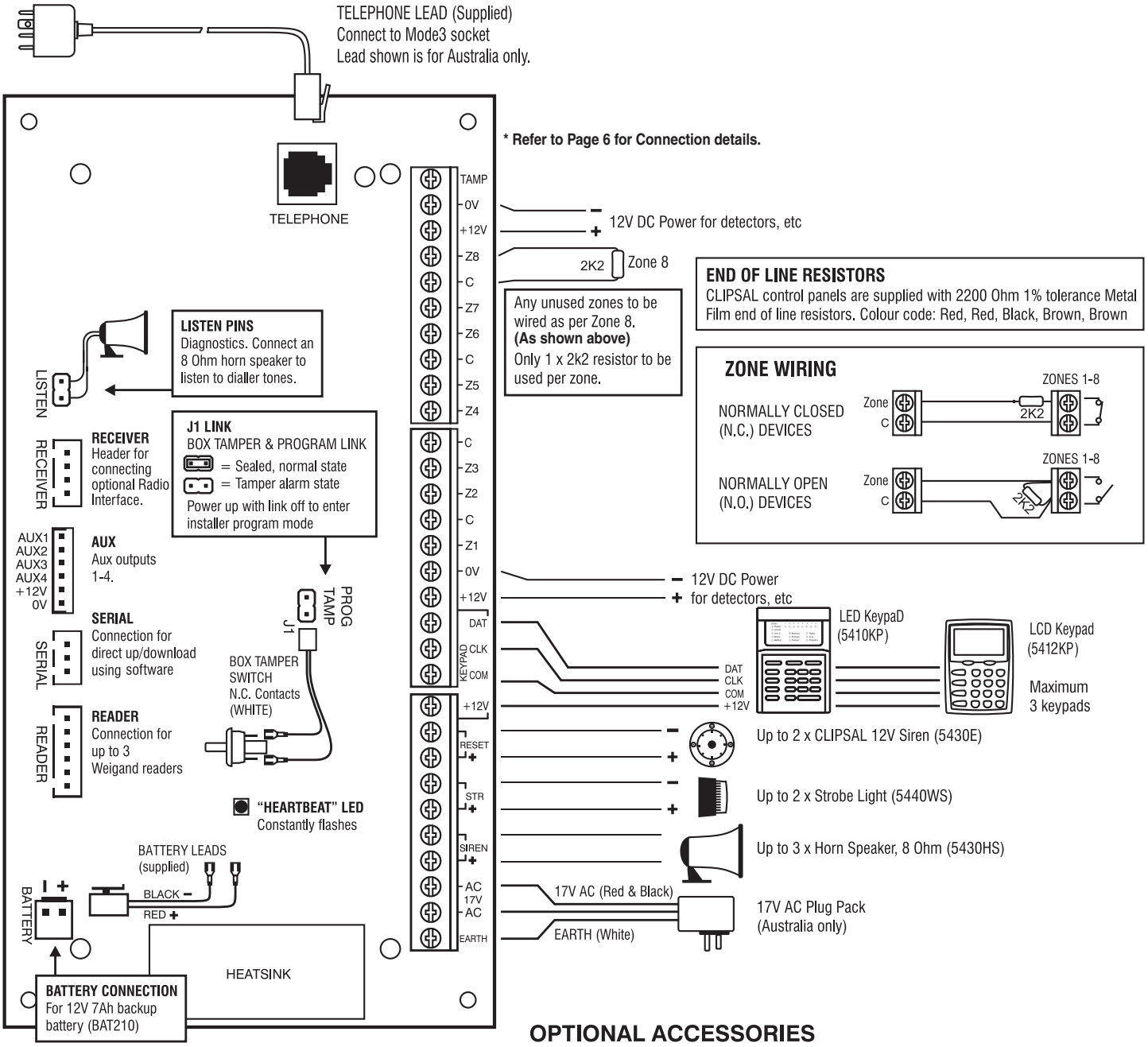
**AUX1:** Programmed by option P121E 1E–8E.
**AUX2:** Programmed by option P122E 1E–8E.
**AUX3:** Programmed by option P123E 1E–8E.
**AUX4:** Programmed by option P124E 1E–8E.
**12V:** 12V d.c. output. Maximum current draw 100mA.
**0V:** 12V ground.

**OUTPUT FUSING**. The 12V outputs, siren, reset and strobe outputs are protected by automatic reset electronic fuses. These outputs will automatically reset once the overload is removed.

**BACKUP BATTERY**. A properly charged battery must be installed to ensure the siren, strobe and reset outputs operate correctly.

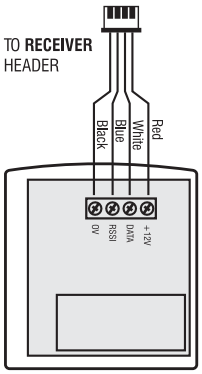
**SIREN LOAD**. A maximum output of 2.0A continuous is available from the SIREN and RESET outputs and 200mA from the STR output.
Recommended maximum power load:
3 x Horn speakers (SIREN output)
2 x strobe lights (STR output)
2 x Internal sirens (5430E) (RESET output)
Note: This assumes no more than 500mA is being drawn from the 12V device outputs.

# 5400 PANEL CONNECTION DIAGRAM

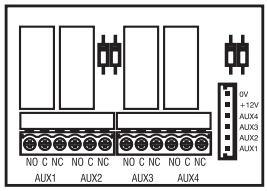



## OPTIONAL ACCESSORIES

### 5400RF RADIO INTERFACE

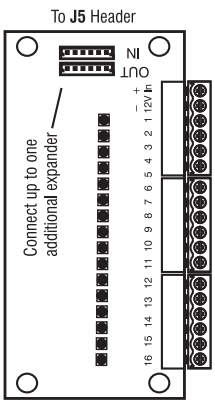



### CLIPSAL RELAY BOARD 5400/4R



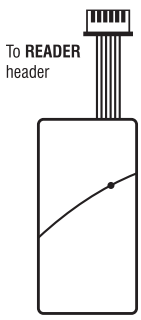

The Relay Board provides 4 relay outputs. Plugs into the J5 AUX header on the main board.

### 5400XE 8 OUTPUT EXPANDER

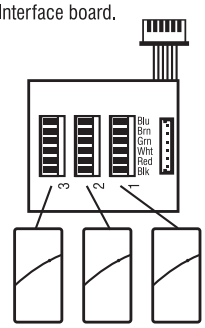



The Output Expander provides 16 programmable open collector outputs. Plugs into the J5 AUX header on the main board. See page **54-55**.

### ACCESS CONTROL WEIGAND READERS

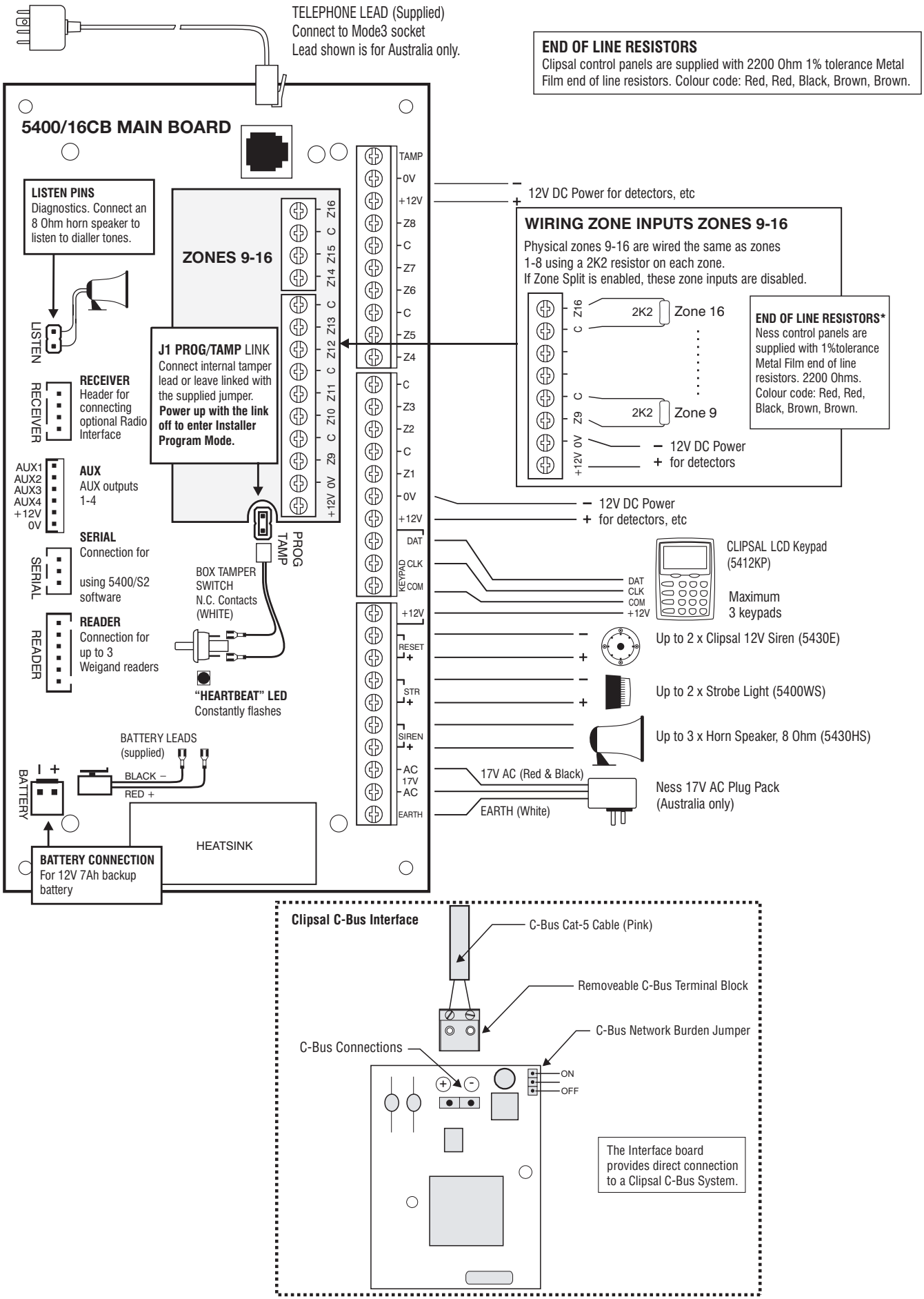



1 x non-addressable Weigand reader can be plugged directlyinto the READER header on the panel main board.

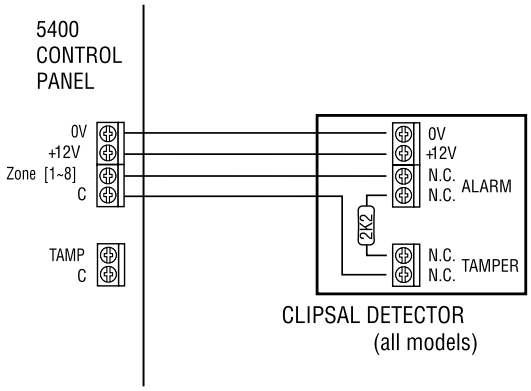



Up to 3 x addressable Weigand readers can be connected via the optional 3 way Reader Interface.

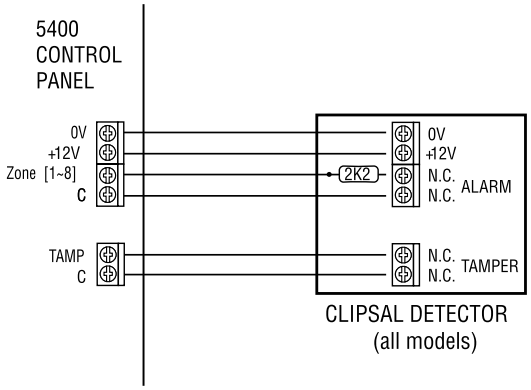
## CONNECTION DIAGRAM



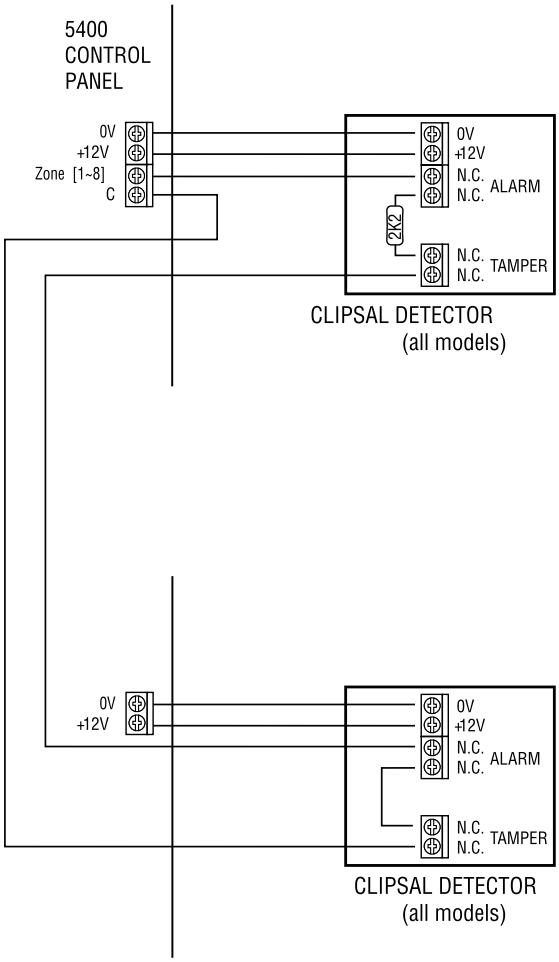
## EXAMPLE 1 — CLIPSAL DETECTORS — 4 WIRE CONNECTION



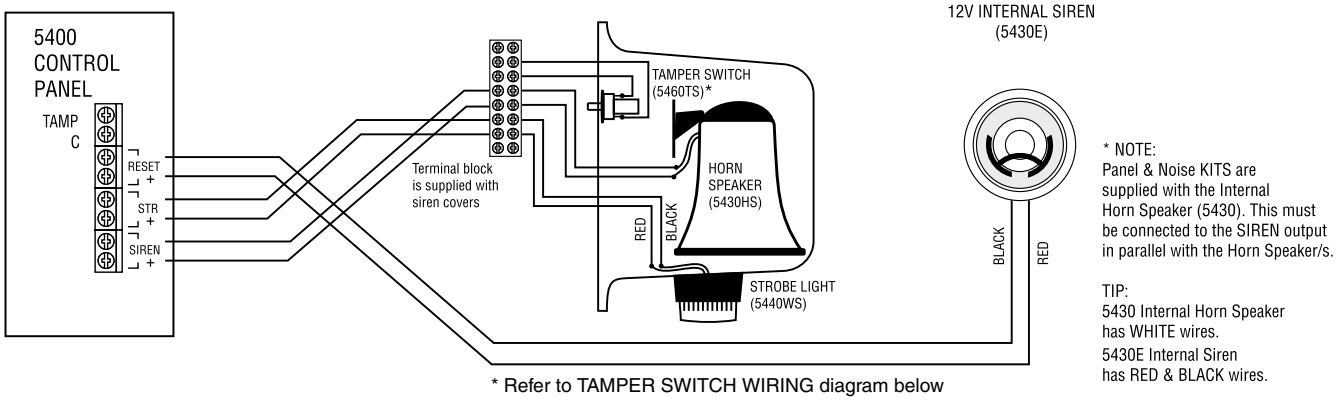

## EXAMPLE 2 — CLIPSAL DETECTORS — 6 WIRE CONNECTION




## EXAMPLE 3 — 2 DETECTOR ON THE SAME ZONE



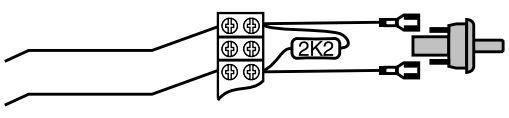

## EXAMPLE 4 — SIREN WIRING 5400 SERIES




* NOTE:
Panel & Noise KITS are supplied with the Internal Horn Speaker (5430). This must be connected to the SIREN output in parallel with the Horn Speaker/s.

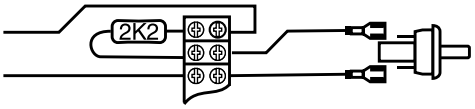
TIP:
5430 Internal Horn Speaker has WHITE wires.
5430E Internal Siren has RED & BLACK wires.

### N.O TAMPER SWITCH (5460TSNO) Colour: BLACK




### ALTERNATIVE TAMPER SWITCH WIRING For N.C. Tamper Switches

N.C.TAMPER SWITCH (5460TSNC) Colour: WHITE



## 5400 KEYPADS

The LED or LCD keypad provides important visual and audible indication of the system status and is the main interface for controlling the many powerful features of the system.

DISPLAY TEST (LCD KEYPAD ONLY)

To display all the keypad icons press and hold the (E) button for at least 2 seconds. All the icons will be on whilst the (E) button is held down.

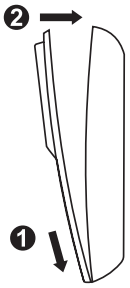
Display Test can be activated at any time either in operating mode or any program mode.

NUMBER OF KEYPADS

Up to 3 LED and/or LCD keypads can be connected to the 5400 panel.

CABLE LENGTH

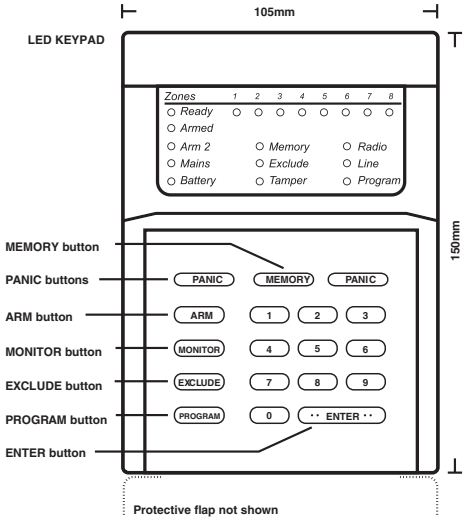
The maximum allowable cable length is 100m (total cable length to all keypads).



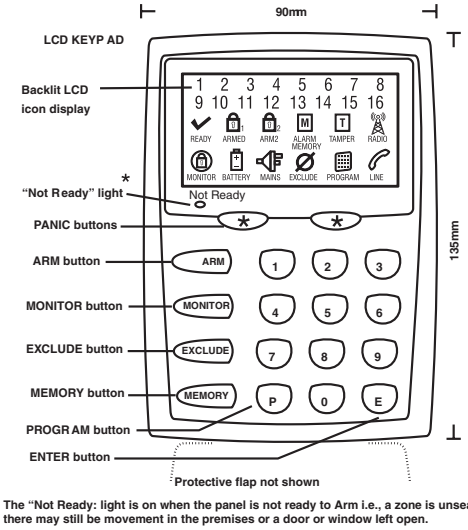

KEYPAD INSTALLATION

1 Unclip the top half of the keypad housing by pushing the top clips down with a small screwdriver and pulling the housing forward.
2 Screw the base of the keypad housing to the wall using the 4 mounting holes provided.
3 Bring the 4 connecting wires to the terminal block on the PCB on the rear of the keypad housing.
4 Connect the wires to the screw terminals as per the wiring diagram shown in this manual.
5 Clip the top half onto the base by first engaging the bottom clips and swinging the top closed. Push hard to ensure the clips engage.
6 Attach the zone list label on the inside of the lid.

LED KEYPAD




LCD KEYPAD



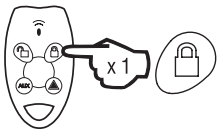
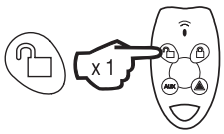
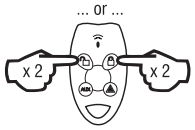
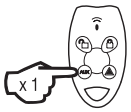
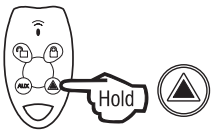

* The "Not Ready: light is on when the panel is not ready to Arm i.e., a zone is unsealed, there may still be movement in the premises or a door or window left open.

| KEYPAD ICON DISPLAY | KEYPAD ICON STATUS | | |
|---|---|---|---|
| | ● OFF | ○ ON | FLASHING |
| ZONES 1-16 | Zone is sealed | Zone is unsealed | Zone alarm |
| READY | Zone is unsealed, or Power fault or System is Armed, or phone line fault | Ready to Arm | |
| 1 ARMED | Disarmed | Armed (AREA 1) | Monitor Mode (LED Keypad only) |
| 2 ARM2 | Disarmed | Armed (AREA 2) | |
| MONITOR | Disarmed | Monitor Mode | |
| MAINS | Normal | | Mains Power is off |
| BATTERY | Normal | | The panel's backup battery is low |
| ALARM MEMORY | Normal | Memory Mode selected | New alarms in memory |
| EXCLUDE | Normal | | Zones are excluded |
| TAMPER | Normal | | Tamper alarm |
| RADIO | Normal | Receiving radio signal | Indicates that a Radio Key or other radio devise has a low battery |
| LINE | Normal | Dialler is online | Phone line fault or failure to communicate |
| PROGRAM | Normal | User Program Mode | Installer Program Mode |
| Not Ready ○ | Ready to Arm | Not ready to Arm | |

### MEMORY MODE - EVENTS INDICATED BY KEYPAD LIGHTS

**LIGHT..... MEMORY EVENT**

zone lights 1–8 or 1–16 ..... zone alarm
(no lights)..... Panel disarmed
ARMED..... Panel armed (or area 1 armed)
ARM2..... area 2 armed
MAINS ..... Mains power failure
BATTERY..... Low battery
TAMPER ..... tamper alarm (Siren cover, panel etc)
EXCLUDE..... Panic alarm
LINE..... Telephone line fail
RADIO, EXCLUDE ..... radio key panic alarm
RADIO, BATTERY, ZONE..... radio device battery low, (device number is indicated by zone lights)
RADIO, BATTERY, ARM..... radio key battery low, (radio key number is NOT indicated)
RADIO, TAMPER, ZONE..... radio device tamper alarm (device number is indicated by zone lights)
RADIO, MONITOR, ZONE ..... radio supervision fail (device number is indicated by zone lights)

| OPERATION | by **KEYPAD** | by **RADIO KEY** | by **ACCESS CARD** or **FOB** |
|---|---|---|---|
| **to ARM**<br>The panel must initially be disarmed. | Press ARM + E<br>(If the ARMING SHORTCUT is enabled, P62E 5E)<br>or press ARM + [USER CODE] + E<br>or press [USER CODE] + E<br>(If CODE ONLY ARMING has been enabled for that user code. Extra Option 4E) |  <br>Press the ON button once. | <br>Present a Card or Fob twice (if P301E 2E is on).<br> <br>Or, present a Card or Fob once + press button (if P301E 3E is on). |
| **to DISARM**<br>To disarm and/or reset alarms. | Press [USER CODE] + E |  <br>Press the OFF button once.* | <br>Present a Card or Fob once. (if P301E 4E is on) |
| **to arm MONITOR MODE**<br>Area1 must initially be disarmed.<br>Monitor Mode can be used if the panel is fully disarmed or if only Area2 is armed, see page 20 for more information. | Press MONITOR + E<br>(If the MONITOR SHORTCUT is enabled, P62E 3E)<br>or press MONITOR + [USER CODE] + E | ... or ...<br>  <br>Press either the OFF button or the ON button twice within 4 seconds (P69E 5E must be on).<br>  <br>Or press the AUX button once (If P120E 3E is on). RK4 radio key only.<br>Radio Key Monitor Arm chirps can be enabled by option P120E 2E (off by default). | |
| **PANIC** alarm | Press * * star keys together<br>or press * + [USER CODE] + E<br>or press * + E<br>(If KEYPAD PANIC SHORTCUT is enabled, P62E 4E) |  <br>Press and hold the PANIC button for at least 4 sec. | |
| **KEYPAD DURESS**<br>Keypad Duress allows the user to send a silent duress report while disarming (if the system is being monitored by a central station). | Press [5, 6, 8 OR 9] + [USER CODE] + E<br>Add one these digits in front of a user code when disarming.<br>This sequence will disarm the panel and send a Duress report by dialler to the central station.<br>(REPORT KEYPAD DURESS must be enabled, P75E 1E) | | |
| **EXCLUDE ZONES**<br>EXCLUDE + E can only be used when the panel is disarmed.<br>EXCLUDE + CODE + E can be used anytime. | Press EXCLUDE + E<br>(If the EXCLUDE SHORTCUT is enabled, P62E 2E)<br>then [ZONE NO.] + E [ZONE NO.] + E (Enter the zone number/s to be excluded.)<br>then press E to exit Exclude mode<br>The Exclude light flashes constantly while zones are excluded. Excluded zones are automatically included next time the panel is disarmed. | | |

* If a user code is assigned to a radio key and has Extra Option 4E enabled (CODE ONLY ARMING), then pressing OFF toggles the panel arm/disarm state.

## **TEMPORARY DAY ZONE (TDZ)** operation

While remaining in normal operating mode, the user can add and remove Temporary Day Zones and enable/disable day zone operation.

| | |
|---|---|
| The panel must initially be disarmed.<br><br>P64E 2E must be on to enable the use of Temporary Day Zones.<br><br>See page xx for more information on Temporary Day Zones. | Press P + E To enter TDZ Selection Mode.<br>then press [ZONE NO.] + E To select one or more zone to be Temporary Day Zones.<br>then press E To save changes and exit TDZ Selection Mode.<br>Press 0 + E To enable/disable TDZ operation.<br>Note: The keypad does not indicate if TDZ is enabled or disabled. |

Use one of these programming summaries for fast setup of your Clipsal 5400 or 5400/16CB control panel as a local, audible monitored or central station monitored system.

QUICK START 1 - LOCAL SYSTEM

Quick Start 1 shows you how to change user code 1 (the master code).

**QUICK START 1**

| STEP | KEYSTROKES | DESCRIPTION | COMMENT |
|---|---|---|---|
| 1 | P 1 2 3 E* | Enters user Program mode. | Program light will turn on. |
| 2 | P 2 0 1 E | Selects the option for user code 1. | The existing code will be displayed on the keypad one digit at a time. |
| 3 | _ _ _ _ E | Enter your new PIN code followed by E. (Cannot start with 0.) | keypad codes can be 3 to 6 digits in length. |
| 4 | _ _ _ _ E | Enter your new PIN code again. | The new code will be displayed on the keypad one digit at a time. |
| 5 | P E | To exit program mode. | Program light will turn off. |

QUICK START 2 - AUDIBLE MONITORING

Quick Start 2 shows you how to change user code 1 (the master code), enable audible monitoring and program a telephone number. This will enable the dialler to report alarms to any telephone including mobile phones.

**QUICK START 2**

| STEP | KEYSTROKES | DESCRIPTION | COMMENT |
|---|---|---|---|
| 1 | P 1 2 3 E* | Enters user Program mode. | Program light will turn on. |
| 2 | P 0 0 0 0 0 0 E* | Enters installer Program mode. | Program light will flash. |
| 3 | P 2 0 1 E | Selects the option for user code 1 | The existing code will be displayed on the keypad one digit at a time. |
| 4 | _ _ _ _ E | Enter your new PIN code followed by E. (Cannot start with 0.) | keypad codes can be 3 to 6 digits in length. |
| 5 | _ _ _ _ E | Enter your new PIN code again. | The new code will be displayed on the keypad one digit at a time. |
| 6 | P 8 6 E 4 E | Turns on option P86E 4E. | Enables audible monitoring. |
| 7 | P 7 0 E | Selects the option for Telephone Number 1. | |
| 8 | _ _ _ _ _ _ _ _ E | Enter the telephone number followed by E. | 15 digits maximum. |
| 9 | P E | To exit program mode. | Program light will turn off. |

QUICK START 3 - CENTRAL STATION MONITORING

Quick Start 3 shows you how to change user code 1 (the master code), enable central station monitoring and program one telephone number. This will enable the dialler to report alarms to a central station.

**QUICK START 3**

| STEP | KEYSTROKES | DESCRIPTION | COMMENT |
|---|---|---|---|
| 1 | P 1 2 3 E* | Enters user Program mode. | Program light will turn on. |
| 2 | P 0 0 0 0 0 0 E* | Enters installer Program mode. | Program light will flash. |
| 3 | P 2 0 1 E | Selects the option for user code 1. | The existing code will be displayed on the keypad one digit at a time. |
| 4 | _ _ _ _ E | Enter your new PIN code followed by E. (Can not start with 0.) | keypad codes can be 3 to 6 digits in length. |
| 5 | _ _ _ _ E | Enter your new PIN code again. | The new code will be displayed on the keypad one digit at a time. |
| 6 | P 8 6 E 2 E | Turns on option P86E 2E. | Enables Contact ID format. |
| 7 | P 7 0 E | Selects the option for Telephone Number 1. | |
| 8 | _ _ _ _ _ _ _ _ E | Enter the telephone number followed by E. | 15 digits maximum. |
| 8 | P 7 2 E | Selects the option for Account Number 1. | |
| 10 | _ _ _ _ E | Enter the Account number followed by E. | 4 digits maximum. The account number is supplied by your central monitoring station. |
| 11 | P E | To exit program mode. | Program light will turn off. |

* Default master code is: 123
* Default installer code is: 000000

**FACTORY DEFAULTS**

Master code: 123
installer code: 000000

**INSTALLER PROGRAM MODE**

installer program mode allows access to ALL program options.

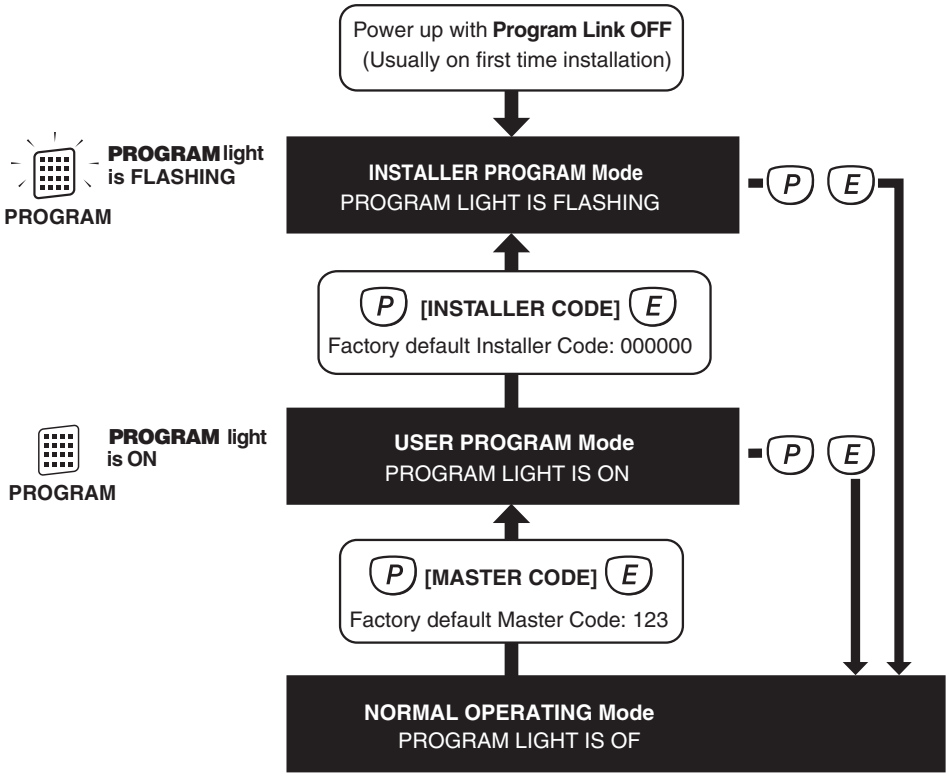
Note: The panel will remain in installer program mode indefinitely.

**USER PROGRAM MODE**

user Program mode allows the owner to program:

- All user codes
- Entry exit times
- Follow me telephone number

Note: The panel will automatically drop out of user program mode to operating mode if no keypad buttons are pressed for 4 minutes.




## PROGRAM MODE LEVELS

Table 4. FLOW CHART

## HOW TO ENTER PROGRAM MODE

**(ALTERNATIVE METHOD IF CODES ARE NOT AVAILABLE)**

METHOD 1. FIRST TIME PROGRAMMING – FROM POWER UP

1. Power-up with the PROG link OFF.

(The PROG link or Box tamper lead must be ON in Operating mode.)

METHOD 2. USING THE KEYPAD TO ENTER PROGRAM MODE

The panel must be disarmed. ♩♩♩

1. Press P **[MASTER CODE]** E The keypad will respond with 3 beeps.
   This is user Program mode (PROGRAM light is ON). ♩♩♩
2. Press P **[INSTALLER CODE]** E The keypad will respond with 3 beeps.
   This is installer Program mode (PROGRAM light is FLASHING).

## HOW TO EXIT PROGRAM MODE

1. Press P then E .
   Exits directly to Operating mode (PROGRAM light is OFF).

## P101E – P116E

## P201E – P256E

**PROGRAM MODE LEVEL**

user, installer, remote by PC (except radio keys and access cards).

**FACTORY DEFAULT**

user code 1: 123

All other codes: [blank]

**NOTES**

1. To clear all codes (except the installer code), enter P98E in installer program mode. This also defaults user code 1 to 123. See Page 52.

2. Open/close reports are identified by user number when the control panel is base station monitored.

Related options:

installer code. See Page 12, how to enter program mode. Page 52, programming the installer code.

installer code default: 000000

**RELATED OPTIONS**

Programming radio codes, page 61

**IMPORTANT NOTES**

A user code can be a keypad code, radio code or reader code, but only one type at any one time.

Any user codes not assigned to be radio codes or reader codes are automatically keypad codes.

By factory default all user codes are keypad codes.

When a user code is selected as a radio code or reader code, its keypad code (if any) is automatically deleted. The same applies to radio codes and reader codes - their codes are auto deleted when the code is changed to any other type.

user code 1 is the master code and is always a keypad code and cannot be programmed to be a radio code or reader code.

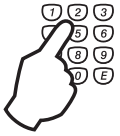
**TIP:** The Clipsal 5400 V5 has 56 user codes which are programmed using a new set of options as per this table. Experienced users can still use option numbers P11E – P25E, but only for programming user codes 1–15.

**RADIO PROGRAMMING** See pages 61, 62.

## USER CODES

5400 version 5 and later have 56 user codes which are used to operate the panel by a variety of methods.

Each user code can be assigned to either a keypad code or a radio key or an access card.



**KEYPAD (PIN) CODES**

Up to 56 keypad codes can be used at up to 3 wired keypads for controlling all panel functions including arming/disarming, monitor mode, panic, memory recall and much more.

keypad codes can be 3 to 6 digits in length and can be individually programme and deleted.

- keypad codes can optionally be programmed to be "arm Only" codes.
- user code 1 is also the master code which is used to enter client program mode.
- All 56 user codes are keypad codes by default. User codes can be programmed to be radio codes or access cards as required.

NOTES

1. The MEMORY E function is recommended for deleting user codes.
2. All codes must be unique to each other. Codes are rejected if already used. Some codes that are similar to existing codes may also be rejected.

**PROGRAMMING KEYPAD CODES**

Press **P [201–256] E** *(The existing code is displayed one digit at a time).*

Press **[NEW code] E [NEW code AGAIN] E** *(The new code is displayed).*
Example: To program the master code to be 1234.
Press **P201E 1234E (1 beep) 1234E (3 beeps)**.
*When re-programming a keypad code, the old code does not need to be deleted first. The new code will overwrite the old code.*

**DELETING KEYPAD CODES**

To delete a user code without programming a new code, press the MEMORY key in place of the code.

Example: To delete user code 2, press P202E MEMORY E

**ARM ONLY CODES**

**'arm Only' is an extra option for user codes. See next page for further information.**

user codes 2–56 can optionally be programmed as arm only codes, which can arm but cannot disarm the panel (Used for cleaners, temporary staff, etc).

Example: To program user code 2 to be 1234 and an arm Only code.
Press **P202E EXCLUDE E 3E EXCLUDE E 1234E 1234E**
(*EXCLUDE E enters Extra options mode, 3E enables the arm Only option, then EXCLUDE E toggles back to normal user code program mode.)*

When the code is viewed in program mode, the ARMED icon is briefly displayed before the digits of the code.

To disable the arm only feature for a keypad code, simply enter the option for that code, press EXCLUDE E to view extra options then press 3 E without re-entering a new code. This retains the existing code and toggles off the arm only feature.

*The arm only feature also applies to radio keys and access cards.*

*arm only codes can also arm the panel directly from monitor mode. (Normally, user codes can arm the panel only if it is fully disarmed.)*

*arm only codes can also arm monitor ,mode as normal.*

## USER CODE OPTIONS TABLE

| | | | EXCLUDE+E toggles Extra options mode. The exclude light indicates this mode is on/off. (installer Program mode only) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **USER CODE** | **OPTION NO.** | **KEYPAD PIN** | **1E** AREA 1 CODE | **2E** AREA 2 CODE | **3E** ARM ONLY | **4E** "CODE ONLY" ARM | **5E** RADIO CODE | **6E** reader code 1 | **7E** reader code 2 | **8E** reader code 3 |
| 1 (Master) | P201E | 123 | ON | | | | | | | |
| 2 | P202E | | ON | | | | | | | |
| 3 | P203E | | ON | | | | | | | |
| 4 | P204E | | ON | | | | | | | |
| 5 | P205E | | ON | | | | | | | |
| 6 | P206E | | ON | | | | | | | |
| 7 | P207E | | ON | | | | | | | |
| 8 | P208E | | ON | | | | | | | |
| 9 | P209E | | ON | | | | | | | |
| 10 | P210E | | ON | | | | | | | |
| 11 | P211E | | ON | | | | | | | |
| 12 | P212E | | ON | | | | | | | |
| 13 | P213E | | ON | | | | | | | |
| 14 | P214E | | ON | | | | | | | |
| 15 | P215E | | ON | | | | | | | |
| 16 | P216E | | ON | | | | | | | |
| 17 | P217E | | ON | | | | | | | |
| 18 | P218E | | ON | | | | | | | |
| 19 | P219E | | ON | | | | | | | |
| 20 | P220E | | ON | | | | | | | |
| 21 | P221E | | ON | | | | | | | |
| 22 | P222E | | ON | | | | | | | |
| 23 | P223E | | ON | | | | | | | |
| 24 | P224E | | ON | | | | | | | |
| 25 | P225E | | ON | | | | | | | |
| 26 | P226E | | ON | | | | | | | |
| 27 | P227E | | ON | | | | | | | |
| 28 | P228E | | ON | | | | | | | |
| 29 | P229E | | ON | | | | | | | |
| 30 | P230E | | ON | | | | | | | |
| 31 | P231E | | ON | | | | | | | |
| 32 | P232E | | ON | | | | | | | |
| 33 | P233E | | ON | | | | | | | |
| 34 | P234E | | ON | | | | | | | |
| 35 | P235E | | ON | | | | | | | |
| 36 | P236E | | ON | | | | | | | |
| 37 | P237E | | ON | | | | | | | |
| 38 | P238E | | ON | | | | | | | |
| 39 | P239E | | ON | | | | | | | |
| 40 | P240E | | ON | | | | | | | |
| 41 | P241E | | ON | | | | | | | |
| 42 | P242E | | ON | | | | | | | |
| 43 | P243E | | ON | | | | | | | |
| 44 | P244E | | ON | | | | | | | |
| 45 | P245E | | ON | | | | | | | |
| 46 | P246E | | ON | | | | | | | |
| 47 | P247E | | ON | | | | | | | |
| 48 | P248E | | ON | | | | | | | |
| 49 | P249E | | ON | | | | | | | |
| 50 | P250E | | ON | | | | | | | |
| 51 | P251E | | ON | | | | | | | |
| 52 | P252E | | ON | | | | | | | |
| 53 | P253E | | ON | | | | | | | |
| 54 | P254E | | ON | | | | | | | |
| 55 | P255E | | ON | | | | | | | |
| 56 | P256E | | ON | | | | | | | |

You can use this table as a programming record.

## USER CODES

### ASSIGNING EXTRA OPTIONS

Each user code has several "extra options" which can be assigned when programming the code or at any time later.

In **NORMAL USER CODE PROGRAMMING mode**, (exclude light is off), you can do the following:
Program keypad codes (see page 13).
Program radio codes (see page 62).
Program access cards (see page 63).
View radio signal strength (see page 59).

In **EXTRA OPTIONS mode**, (exclude light is on), you can assign several powerful functions to each user code. See below.

**To view and program the Extra options:**

1. Select a user code (P201–P256E). *The exclude light is OFF.*
2. Press EXCLUDE E. *The exclude light is ON.*

The following Extra options can now be changed:

**1E** AREA 1 CODES. This option is used to assign any user code to area 1. (user codes 1–15 are assigned to area 1.)

**2E** AREA 2 CODES. Assigns user codes to operate area 2.

- *area 2 will not arm unless it has one or more zones assigned to it (P46E).*
- *user codes can be assigned to area 1, area 2, both areas or no areas. (If a code is not assigned to any area/s, the code can be used to trigger an output on the optional output expander/s.)*

**3E** ARM ONLY. User codes 2–56 can be programmed to arm but not disarm the panel. (See page 12).

**4E** "CODE ONLY" ARMING. Enables selected user codes to allow code ONLY ARM. arming can then be done either with or without the use of the ARM key.

In the case of radio codes the radio key OFF button will toggle the armed state. The action is to toggle the existing armed states of the areas assigned to the radio key.

- If the user code is assigned to both AREA 1 and AREA 2. If AREA 1 is already armed, then entering the code will disarm AREA 1 - but arm AREA 2.

  If the intention is to either ARM or DISARM both areas using this code then ARM <code> must be used first to arm both areas. Once both are armed they can be disarmed.
- If in monitor mode, then the action is to exit monitor mode.

**5E** RADIO CODE. Enables selected user codes as radio codes for operation by radio key or radio keypad. (Page 61 - how to program radio codes).

**6E** READER CODE 1. Enables selected user codes as access Control codes assigned to the optional access control reader 1. (Page 62 - how to program access Cards).

**7E** READER CODE 2. Enables selected user codes as access Control codes assigned to the optional access control reader 2. (Page 62 - how to program access Cards).

**8E** READER CODE 3. Enables selected user codes as access Control codes assigned to the optional access control reader 3. (Page 62 - how to program access Cards).

- *A user code can be assigned to any one, two or all three access control readers.*

| Option No. | Description | Default | Note |
|---|---|---|---|
| P26E | ENTRY DELAY TIME 1 | 20 | seconds |
| P27E | ENTRY DELAY TIME 2 | 6 | x10 = 60seconds |
| P28E | EXIT DELAY TIME | 60 | seconds |
| P29E | SIREN RESET TIME | 5 | minutes |

## P26E

**PROGRAM MODE LEVEL**
User, Installer, remote by PC.

**FACTORY DEFAULT**
20 (seconds)

**NOTES**
- Programmable from 1 – 99 seconds.

### ENTRY DELAY TIME1

The entry delay Time 1 is the time given to disarm the Panel after a entry delay 1 zone is unsecured.

The entry delay Time1 setting is from 1 to 99 seconds.

**PROGRAMMING SEQUENCE:**

**P26E** *existing time is displayed one digit at a time*

**[ENTER NEW TIME] E** *new time is displayed one digit at a time*
EXAMPLE: To program entry delay Time1 to be 30 seconds: P26E 30E

## P27E

**PROGRAM MODE LEVEL**
User, Installer, remote by PC.

**FACTORY DEFAULT**
60 (seconds)

**NOTES**
- Programmable from 10 – 990 seconds.

### ENTRY DELAY TIME2

The entry delay Time2 is the time given to disarm the panel after an entry delay2 zone is unsecured.

The entry delay Time2 setting is from 10 to 990 seconds (1 – 99).

Note: The entry delay Time2 is set in 10 second increments so that a value setting of 6 means a 60 second delay.

**PROGRAMMING SEQUENCE:**

**P27E** *existing time is displayed one digit at a time*

[**ENTER NEW TIME] E** *new time is displayed one digit at a time*
EXAMPLE: To program entry delay Time2 to be 600 seconds:
P27E **60E**

## P28E

**PROGRAM MODE LEVEL**
User, Installer, remote by PC.

**FACTORY DEFAULT**
6 (= 60 seconds)

**NOTES**
- Programmable from 1 – 99 seconds

**RELATED OPTIONS**
P62E 8E exit time x10

### EXIT DELAY TIME

The Exit Delay Time is the time given to secure and depart the premises after the Panel is armed. All zones (except 24hr zones) are inactive during the Exit Delay time.

The Exit Delay Time setting is from 1 to 99 seconds.

**PROGRAMMING SEQUENCE:**

**P28E** *existing time is displayed one digit at a time*

**[ENTER NEW TIME] E** *new time is displayed one digit at a time*
EXAMPLE: To program Exit Delay to be 85 seconds:
P28E **85E**

## P29E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
5 minutes.

**NOTES**
- Programmable from 1 – 99 minutes.
- Siren times of longer than 5 minutes are contrary to noise pollution regulations in most areas.

### SIREN RESET TIME

The Siren Reset Time sets the duration of the Siren and Reset outputs.

The Siren Reset Time setting is from 1 to 99 minutes.

**PROGRAMMING SEQUENCE:**

**P29E** *existing time is displayed one digit at a time*

**[ENTER NEW TIME] E** *new time is displayed one digit at a time*
EXAMPLE: To program Siren Time to be 4 minutes:
P29E **4E**

## P30E – P36E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
Normal sensitivity.
P30E, all zones = ON.

**NOTES**
- Sensitivity can be individually programmed for each zone.
- zones are allocated to one sensitivity level at any one time. Turning a zone ON in a sensitivity level, turns the zone OFF in any other sensitivity level.
- To revert zone sensitivity back to Normal, turn on the required zone/s at P30E.

Sensitivity Level "Extreme" (P31E) is provided as a guide to the upper limit and should **NOT BE USED**.

For compatibility with existing installations, the sensitivity levels P31E to P36E are identical to previous versions of 5400.

ADJUSTING SENSORS
Sensors are sensitive to high frequencies and insensitive to low frequencies. Therefore it is not necessary to apply much force to the protected structure, rather a very rapid succession of blows.

The sensitivity has been correctly adjusted when a single blow applied with a soft object (e.g. by hand) does not cause an alarm whereas a rapid series of blows (using a metal object such as a screwdriver blade) will cause an alarm.

## P37E – P38E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT** all off

**NOTES**
- A Long response zone cannot be a Normal zone or Vibration zone at the same time.
- To convert zone/s back to a normal zone, turn on the required zone/s at P30E.

**RELATED OPTIONS**
P301E 5E-7E Request to exit (REX)

## VIBRATION SENSITIVITY

Each zone has individually adjustable sensitivity for connection of a vibration sensor. Zone sensitivity is adjusted by toggling zones ON in options P30E to P36E.

P30E is normal sensitivity, vibration analyser disabled. This is used for normal alarm devices. Zone response time, 200ms.

P31–36E are the options for the 6 levels of vibration sensitivities. P31E is the most sensitive setting.

**PROGRAMMING SEQUENCE:**

**P [30–38] E** *zones are displayed* **[zone No] E**

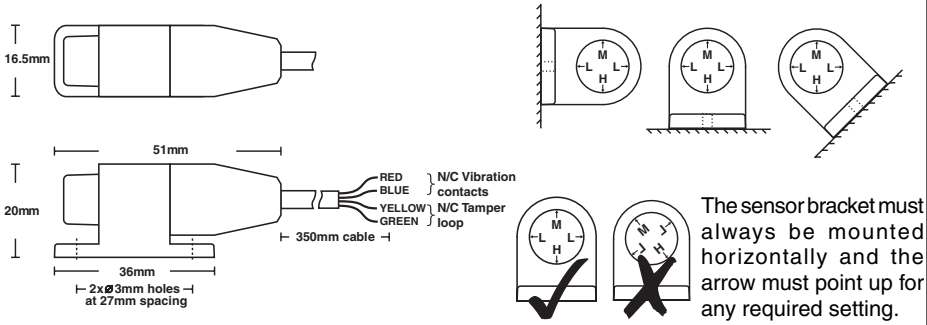
EXAMPLE: To program zones 2 and 3 to be medium sensitivity:
**P34E 2E 3E** *the keypad display will show zone lights 2 & 3 on.*

| | | | ZONES 1–8 | | | | | | | | ZONES 9–16 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Option No. | Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | **P30E** | **NORMAL** | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| VIBRATION OPTIONS | P31E | Vibration EXTREME* | | | | | | | | | | | | | | | | |
| | P32E | Vibration HIGHEST | | | | | | | | | | | | | | | | |
| | P33E | Vibration HIGH | | | | | | | | | | | | | | | | |
| | P34E | Vibration MEDIUM | | | | | | | | | | | | | | | | |
| | P35E | Vibration LOWER | | | | | | | | | | | | | | | | |
| | P36E | Vibration LOWEST | | | | | | | | | | | | | | | | |
| | P37E | 1 second ZONES | | | | | | | | | | | | | | | | |
| | P38E | 3 second ZONES | | | | | | | | | | | | | | | | |

* Extreme sensitivity (P31E) **should not be used**. It is provided as a guide only.

Vibration Sensor

In addition to zone sensitivity adjustment, the overall sensitivity of the sensor can be adjusted by rotating the body of the sensor within its bracket.




The sensor bracket must always be mounted horizontally and the arrow must point up for any required setting.

## LONG RESPONSE ZONES

Long Response zones are normal alarm zones with a long reaction time. Individual zones can be programmed to have either a 1 second response (P37E) or 3 second response (P38E).

This is useful where zones 5, 6 or 7 have been programmed as REX inputs for access control purposes, (P301E 5E-7E). To prevent accidental door opening, the REX button then must be pressed and held for 1 sec or 3 sec, as programmed.

**PROGRAMMING SEQUENCE:**

**P37E or P38E [zone No]E** *toggles zones ON and OFF*

DELAY GROUP

Only one option per zone can be selected. For example; a zone cannot be instant and delayed at the same.

| Option No. | Description | ZONES 1–8 | | | | | | | | ZONES 9–16 (5400/16CB) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| P39E | DOUBLE TRIGGER zones | | | | | | | | | | | | | | | | |
| P40E | INSTANT zones | | | ON | ON | ON | ON | ON | ON | | | | | | | | |
| P41E | ENTRY DELAY 1 zones | ON | | | | | | | | | | | | | | | |
| P42E | HANDOVER zones | | ON | | | | | | | | | | | | | | |
| P43E | ENTRY DELAY 2 zones | | | | | | | | | | | | | | | | |
| P44E | LOCKOUT zones (Reset O/P) | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P45E | AREA 1 zones | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P46E | AREA 2 zones | | | | | | | | | | | | | | | | |
| P51E | MONITOR zones | | | | | | | | | | | | | | | | |
| P52E | 24HR zones | | | | | | | | | | | | | | | | |
| P53E | DAY zones | | | | | | | | | | | | | | | | |

## P39E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No double trigger zones.

**NOTES**
- Double trigger is useful for preventing unwanted alarms from zones in harsh environments such as sheds and garages.
- **0E** will turn all selections OFF.

**MEMORY E** will turn all selections ON.

### DOUBLE TRIGGER ZONES

zones programmed to double trigger will recognise an alarm condition if:
- The zone has been triggered twice within a 4 minute period.
- If any 2 zones (both programmed for double trigger), each trigger once.
- The zone is left unsealed for longer than 15 seconds.

**PROGRAMMING SEQUENCE:**

**P39E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone is not a double trigger zone
[zone No] ON: The zone is a double trigger zone

## P40E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
D8, 3E–8E ON: Zones 3–8 are Instant.

**NOTES**
- When a zone is selected for this type, it is automatically deselected from any other zone type in the DELAY GROUP.

### INSTANT ZONES

Instant zones operate only in the armed state. When armed at the expiry of exit time, instant zones will activate assigned outputs immediately when triggered.

**P40E [zone No]E** *turns the options ON*

[zone No] ON: The zone is an instant zone
To deselect the option, select a different zone type in the DELAY GROUP.

## P41E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
1E ON: Zone 1 has entry delay1.

**NOTES**
- The keypad sonalert will beep during entry delay as a reminder to disarm the panel. Entry beeps can be disabled by program option P60E 1E.
- When a zone is selected for this type, it is automatically deselected from any other zone type in the DELAY GROUP.

### ENTRY DELAY1 ZONES

entry delay1 zones operate only in the armed state. When armed, at the expiry of exit time these zones will activate the entry delay Timer1 (P26E) when they are triggered. If the panel is not disarmed before the expiry of the entry delay Timer1, the alarm outputs will be activated.

**P41E [zone No]E** *turns the options ON*

[zone No] ON: The zone is an entry delay1 zone
To deselect the option, select a different zone type in the DELAY GROUP.

## P42E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
2E ON: Zone 2 is a Handover zone.

**NOTES**
- When a zone is selected for this type, it is automatically deselected from any other zone type in the DELAY GROUP.

### HANDOVER ZONES

Handover zones are delayed only if entry is made through an entry delay zone first. If a Handover zone is triggered first, the zone behaves as an instant zone. Normally, the “point of entry” zone should be Delay zone, with any other zones in the entry path programmed as Handover zones.

**PROGRAMMING SEQUENCE:**

**P42E [zone No]E** *turns the options ON*

P42E [zone No]E ON: The zone is a handover zone
To deselect the option, select a different zone type in the DELAY GROUP.

## P43E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No zones have entry delay2.

### ENTRY DELAY2 ZONES

When an entry delay2 zone is triggered, it has entry delay as set by the entry delay time2 (P27E).

**PROGRAMMING SEQUENCE:**

**P43E [zone No]E** *turns the options ON*

P43E [zone No]E ON: The zone is an entry delay2 zone
To deselect the option, select a different zone type in the DELAY GROUP.

## P44E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All ON: All zones are lockout zones.

**NOTES**
- The SIREN output always locks out.
- **0E** will turn all selections OFF. **MEMORY E** will turn all selections ON.

**RELATED OPTIONS**
**P60E 4E** tamper reset lockout.
**P78E** Multiple alarm reports.

### RESET LOCKOUT ZONES

All zones and tamper input can be programmed to lockout, i.e. cause the RESET OUTPUT to sound only once whilst the panel is armed.

The RESET OUTPUT is then locked out for that alarmed zone until entering a valid code has reset the panel. If using area partitioning, disarming either partition resets the zone lockout for both partitions.

**PROGRAMMING SEQUENCE:**

**P44E [zone No]E** *toggles the options ON and OFF*

P44E [zone No]E OFF: The zone is not a lockout zone
P44E [zone No]E ON: The zone is a lockout zone

# AREA PARTITIONING

| | | ZONES 1–8 | | | | | | | ZONES 9–16 (5400/16CB) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Option No. | Description | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** |
| P45E | AREA 1 ZONES | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P46E | AREA 2 ZONES | | | | | | | | | | | | | | | | |

## P45E, P46E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
No zones assigned to area 2.

**NOTES**
- For options P45E and P46E, **[zone No] E** toggles the selection ON and OFF.
- zones assigned to BOTH areas become common zones.
- If no area operation is required, assign all zones to area 1. (This is also the factory default).

### ASSIGNING ZONES TO AREAS

Assign (or remove) zones that will operate in area 1 and/or area 2.

**PROGRAMMING SEQUENCE:**

**P45E [zone No]E** *toggles the options ON and OFF for area1*

[zone No] OFF: The zone is not in area1
[zone No] ON: The zone is in area1
**P46E [zone No]E** *toggles the options ON and OFF for area2*

[zone No] OFF: The zone is not in area2
[zone No] ON: The zone is in area2
EXAMPLE:
To program *zones 1–4 for area 1 and zones 1, 5–8 for area 2.*

In this example, we have assigned zone 1 to both areas, so it becomes a Common zone.

**P45E use the [zone No] E** *sequence to turn ON only zones 1–4.*

**P46E use the [zone No] E** *sequence to turn ON zone 1 and zones 5–8.*

## AREA PARTITIONING

DEFINITION

area partitioning allows the control panel zones to be split into two partitions; area1 and area2. The panel then effectively operates as two separate systems sharing only the siren outputs and dialler.

COMMON AREA ZONES

zones assigned to both areas are armed only when area 1 and area 2 are both armed. This allows the Common area zone/s to be shared by both areas.

For example, office A and office B operate as separate areas but the entrance foyer used by both offices is assigned to both areas meaning it will automatically arm when both areas have armed. The Common area then automatically disarms when either area 1 or area 2 disarms.

USER CODE ASSIGNMENT

A user code assigned to an area can arm and disarm only that area. User codes assigned to both areas will operate both areas simultaneously.

OPERATION

arming and disarming is carried out as normal from a single keypad or separate keypads installed in both areas or by radio key.

area operation only applies to zones when they are in the armed state. This means that day zones and 24hr zones are independent of area operations.

## AREA PARTITIONING & MONITOR MODE

The panel can be armed in MONITOR mode if area2 is already armed on these conditions:

1. area 1 must be OFF.
2. area 2 must be armed first, and then monitor armed – not the reverse.
3. zones assigned to both monitor mode (P51E) and to area 2 (P46E) will act as monitor zones when both area 2 and monitor are armed.
4. zones must be assigned to P51E to allow monitor arm.

Note: Monitor arming when AREA 2 is armed cannot be done by radio key (double OFF button) or by keyswitch.

Note: Monitor mode is not available when area 1 is armed.

## MONITOR MODE

Monitor mode, (or home mode), allows selected zones to be armed whilst the system is disarmed. For example, this is often used to arm door and windows sensors overnight, while allowing free movement within the house.

- monitor mode will not work if area 1 is armed.
- zones which are to be armed in monitor mode are selected using option P51E.
- monitor mode can be armed by: keypad: MONITOR+[code]+E or MONITOR+E
  radio key: See option P69E 5E
  access Card:
- audible outputs in monitor mode (set by options P63E 1E-4E) are independent of audible outputs in fully armed mode.
- If dialler reporting is enabled, monitor mode alarms will be reported as normal providing that:
- The zone/s are selected to report alarms by option P74E.
- Options P64E 1E & 3E are off. (Brief monitor alarm, monitor entry delay2).
- zones selected to be entry delay1 zones also have entry delay in monitor mode.
- If monitor zones entry delay2 (P64E 3E) is enabled, then *all* monitor zones will have entry delay as set by P27E.
- monitor mode will not work if no zones are selected as monitor zones (P51E). To create monitor zones the zone must be configured first via "installer".

## TEMPORARY DAY ZONES

The temporary day zone feature allows easy and flexible day zone selection and operation.

While remaining in normal operating mode, the user can add and remove temporary day zones and enable/disable day zone operation using simple key strokes.

TO ENABLE TEMPORARY DAY ZONES

To enable temporary day zone selection and operation, the brief day alarm feature (installer option P64E 2E) must be ON. If P64E 2E is OFF, the temporary day zone feature will be unavailable but permanent day zones will still operate and will sound the programmed output while the zone is unsealed.

P64E 2E is OFF by default.

USER COMMANDS (In normal Operating mode).

(P) + (E) Selection mode. Enter **P** followed by **E** when in operating mode to enter temporary day zone selection mode.

**[zone No.]**+ (E) zone selection. To select or deselect zones to be temporary day zones. The selected zones are indicated by the corresponding zone number.

Permanent day zones, (set by installer option P53E), are not displayed in selection mode. permanent day zones can be selected as temporary day zones but this has no effect as those zones are already day zones.

(E) Saves changes and returns to normal operating mode.

(0) + (E) Enables and Disables Day mode. This enables/disables both Temporary and Permanent day zones.

When day mode is enabled, any unsealed day zone will sound the programmed output for 2 seconds. When day mode is disabled, an unsealed day zone will simply be indicated on the keypad as an unsealed zone. (Note: The keypad does not indicate if day mode is enabled or disabled).

AUX 2 OPTION

When the temporary day zone feature is enabled, the installer option P63E 6E selects AUX 2 output instead of the strobe output. This allows a remote warning device such as a buzzer to be connected for day zone warning. This may be needed if an additional audible day zone warning is needed, although the keypad sonalert (P63E 7E) is more than adequate in most cases.

RELATED OPTIONS

**P64E 2E**, brief day alarm. Turn this option on to enable temporary day zones. Factory default = OFF.

**P63E 5E**, Day mode to Reset output.

**P63E 6E**, Day mode to strobe output.

If P64E 2E is ON, then this option sends day alarms to the AUX 2 output.

**P63E 7E**, Day mode to Sonalert.

**P63E 8E**, Day mode to Siren output.

**P53E**, Permanent day zone selection.

Temporary day zone selections will be lost if the panel is powered down or reset, but are not affected by arming/ disarming or entering program mode.

## P47E, P48E, P49E, P50E

See page 13, programming user codes.

## ASSIGNING USER CODES TO AREAS

options P201E–P256E are now used for assigning user codes to areas.

(Experienced users can still use options P47E–P50E for this function, but only up to user code 15.)

## P51E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No monitor zones.

**NOTES**
By default, all monitor zones have entry delay2, see P64E 3E. If this option is off monitor zones have normal entry delay attributes set by options P40E–P42E.

**RELATED OPTIONS**
**P63E** Monitor mode output mapping.
**P64E 1E** Brief monitor alarm.
**P64E 3E** Monitor zones have entry delay2.
**P120E 2E** Monitor arm chirps by radio key.
**P120E 3E** Radio AUX button arms monitor mode.

## MONITOR ZONES

monitor zones allow you to arm selected zones while others are ignored. Typically used for perimeter zones such as windows and doors while you are at home.

For example: upstairs zones are disarmed while downstairs zones are armed in monitor mode.

**PROGRAMMING SEQUENCE:**

**P51E [zone No]E** *toggles the options ON and OFF*

P51E [zone No]E OFF: The zone is not a monitor zone
P51E [zone No]E ON: The zone is a monitor zone

NOTE: Zones selected to report zone alarms (P74E) will by default report alarms in monitor mode, (if the dialler is enabled).

The brief monitor alarm option P64E 1E, when enabled, prevents monitor alarms from reporting.

## P52E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No 24hr zones.

**NOTES**
- The tamper input is always a 24hr zone.
- For silent 24hr zones, deselect the zone/s from options P54E-P57E (Reset, strobe, sonalert & siren).
- To change a 24hr zone to any other zone type, the zone must also be re-assigned to an AREA (P45E or P46E).

## 24hr ZONES

24hr zones operate at all times regardless of the mode of panel operation, i.e. Armed, disarmed or monitor. When alarmed, these zones will activate assigned outputs immediately. To reset those alarms a valid user code must be entered.

Selecting a zone as 24hr will override any other zone type setting such as instant, delayed or handover. 24hr zones are independent of area operation. All other zone types must be assigned to at least one area to become active.

**PROGRAMMING SEQUENCE:**

**P52E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone is not a 24hr zone
[zone No] ON: The zone is a 24hr zone

## P53E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No day zones.

**RELATED OPTIONS**
**P63E 5E-8E** day zone output mapping.
**P64E 2E** Brief Day mode alarm.
**P120E 6E** smart beeps.
TYPICAL USES: Instant alert when a delivery door is opened, doorway alert for a shop.

## DAY ZONES

day zones operate when the panel is fully disarmed, i.e. when area 1, area 2 and monitor are all off. When alarmed, these zones will activate their assigned outputs instantly.

The outputs mapped to the day zone will turn on while the zone is unsealed. Turn P64E 2E on, to limit day zone alarms to 2 seconds.

The temporary day zones feature allows day mode to be easily enabled/disabled and day zones added/removed by the user from any keypad.

**PROGRAMMING SEQUENCE:**

**P53E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone is not a day zone
[zone No] ON: The zone is a day zone

See page 19 for information on TEMPORARY DAY ZONES.

## ZONE TO OUTPUT MAPPING

When a zone alarms, it can turn on any or all of the following 6 outputs: sonalert, strobe, siren, reset, AUX1, AUX2.

The programming is selected with options P54E – P59E. Simply set the zone number to the output to select it. The zone LED will indicate if the zone is selected.

The tamper input and the keypad panic can be programmed to turn on the reset, strobe, sonalert and Siren by using option P61E.

Zone to output mapping applies to zones when the panel is in the armed or 24hr state.

For MONITOR and DAY mode output mapping – see Option P63E 1E–8E, page 27.

| MAPPING ZONES TO OUTPUTS | | ZONES 1–8 | | | | | | | | ZONES 9–16 (5400/16CB) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Option No. | Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| P54E | RESET zones | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P55E | STROBE zones | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P56E | SONALERT zones | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P57E | SIREN zones | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P58E | AUX1 zones | | | | | | | | | | | | | | | | |
| P59E | AUX2 zones | | | | | | | | | | | | | | | | |

### P54E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All ON: All zones trigger reset output.

**NOTES**
- **0E** will turn all selections OFF.
- **MEMORY E** will turn all selections ON.

## RESET OUTPUT ZONES

Selects the zones to trigger the reset output.

**PROGRAMMING SEQUENCE:**

**P54E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone will not trigger the reset output
[zone No] ON: The zone will trigger the reset output

### P55E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
all ON: All zones trigger strobe output.

**NOTES**
- **0E** will turn all selections OFF.
- **MEMORY E** will turn all selections ON.

## STROBE OUTPUT ZONES

Selects the zones to trigger the strobe output.

**PROGRAMMING SEQUENCE:**

**P55E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone will not trigger the strobe output
[zone No] ON: The zone will trigger the strobe output

### P56E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All ON: All zones sound the keypad Sonalert.

**NOTES**
- **0E** will turn all selections OFF.
- **MEMORY E** will turn all selections ON.

## KEYPAD SONALERT ZONES

Selects the zones which will sound the keypad sonalert (beeper).

**PROGRAMMING SEQUENCE:**

**P56E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone will not trigger the keypad sonalert
[zone No] ON: The zone will trigger the keypad sonalert

## P57E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All ON: All zones trigger Siren output.

**NOTES**
- **0E** will turn all selections OFF
- **MEMORY E** will turn all selections ON

### SIREN OUTPUT ZONES

Selects the zones to trigger the siren output.

**PROGRAMMING SEQUENCE:**

**P57E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone will not trigger the siren output
[zone No] ON: The zone will trigger the siren output

## P58E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No zones trigger AUX1.

**NOTES**
- **0E** will turn all selections OFF.
- **MEMORY E** will turn all selections ON.

**RELATED OPTIONS**
**P121E 5E-8E** day zone output mapping.

### AUX1 OUTPUT ZONES

Selects the zones to trigger the AUX1 output on the main board. This option selects *which* zones trigger AUX1. Use P121E to enable the ouput.

Once turned on by a zone alarm, the output will remain on until the panel is reset/disarmed.

**PROGRAMMING SEQUENCE:**

**P58E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone will not trigger the AUX1 output
[zone No] ON: The zone will trigger the AUX1 output

## P59E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No zones trigger AUX2.

**NOTES**
- **0E** will turn all selections OFF.
- **MEMORY E** will turn all selections ON.

### AUX2 OUTPUT ZONES

Selects the zones to trigger the AUX2 output on the main board. This option selects *which* zones trigger AUX2. Use P122E to enable the ouput.

Once turned on by a zone alarm, the output will remain on until the panel is reset/disarmed.

**PROGRAMMING SEQUENCE:**

**P59E [zone No]E** *toggles the options ON and OFF*

[zone No] OFF: The zone will not trigger the AUX2 output
[zone No] ON: The zone will trigger the AUX2 output

| Option No. | Description | Entry beeps 1E | keyswitch monitor/disarm 2E | keyswitch arm/disarm 3E | tamper Siren lockout 4E | Duress to RESET output 5E | Auto exclude zones 6E | Auto off, keypad display 7E | Delay area1,2 outputs 8E |
|---|---|---|---|---|---|---|---|---|---|
| P60E | VARIOUS OPTIONS | ON | | | ON | | ON | | |

## P60E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
Entry beeps ON.

### ENTRY BEEPS

The sonalert will beep during entry delay.

**PROGRAMMING SEQUENCE:**

**P60E 1E** *toggles the option ON and OFF*

OFF: Entry beeps OFF
ON: Entry beeps ON

## P60E 2E, 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
No keyswitch enabled.
P60E 3E, 4E off.
P120E 1E off.

**NOTES**

- The keyswitch always arms area1 only. The keyswitch always disarms both area1 and area 2.

**RELATED OPTIONS**
P120E 1E Latched keyswitch.
P120E 4E keyswitch disarms only.
P120E 5E keyswitch arms only.

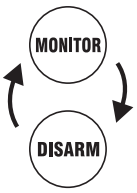
### KEYSWITCH OPERATION

An externally fitted, normally open momentary keyswitch can be used to arm, disarm or arm the monitor mode.

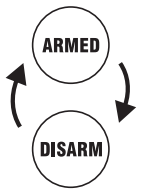
The keyswitch is wired to zone 8 (zone 8 is then no longer available as a normal alarm input, but is still available for use as a radio zone).

**PROGRAMMING SEQUENCE:**

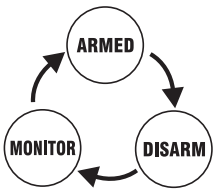
**P60E 2E or 3E** *toggles the option ON and OFF*
2E & 3E OFF: No keyswitch operation. Zone 8 is a normal alarm input.
2E ON: keyswitch cycles between monitor and disarm.
3E ON: keyswitch cycles between arm and disarm.
2E & 3E ON: keyswitch cycles between arm, monitor and disarm.



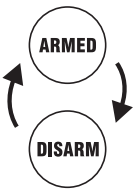

Momentary keyswitch
P60E 2E is ON




Momentary keyswitch
P60E 3E is ON




Momentary keyswitch
P60E 2E is ON
P60E 3E is ON

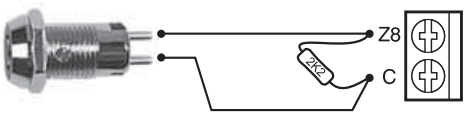



Latching keyswitch
P120E 1E is ON

### KEYSWITCH WIRING

If P60E 3E or 4E are enabled, use a momentary action keyswitch with normally open contacts. A momentary closed circuit across the resistor will toggle panels modes. Open circuit the resistor to trigger Panic if required. (Panic on this input is disabled if P120E 1E is enabled.)

If P120E 1E is enabled, use a latching keyswitch. When the resistor is sealed, panel is disarmed. If the resistor is unsealed (either by open circuit or short circuit) the panel will arm area 1 (area 2 will be ignored).




KEYSWITCH WIRING.
A momentary or latching keyswitch can be wired as shown.

## P60E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON tamper Reset lockout enabled.

**RELATED OPTIONS**
**P44E** lockout zones.

### TAMPER SIREN LOCKOUT

This option programs the tamper input to lockout, i.e. cause the Siren & Reset outputs to sound only once whilst the panel is armed.

**PROGRAMMING SEQUENCE:**

**P60E 4E** *toggles the option ON and OFF*

OFF: tamper Reset lockout disabled
ON: tamper Reset lockout enabled

## P60E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF No Reset output on Duress alarm.

**RELATED OPTIONS**
**P75E 1E** Enable reporting of duress.

### DURESS TO RESET OUTPUT

keypad duress is normally a silent alarm. This option makes the Duress alarm trigger the reset output. To disarm with Duress, add any of the digits 5,6,8 or 9 in front of the user code when disarming.

**PROGRAMMING SEQUENCE:**

**P60E 5E** *toggles the option ON and OFF*

OFF: No Reset output on Duress alarm
ON: Duress alarm triggers Reset output

## P60E 6E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON Auto exclude enabled.

**RELATED OPTIONS**
**P62E 7E** Siren burst on auto exclude.

### AUTO EXCLUDE ZONES

If a zone is unsealed at the end of exit time the panel can either exclude (ignore) that zone or immediately alarm.

The panel will give a 2 second Siren burst at the end of exit time to indicate that the panel is armed with a zone/s auto excluded. The 2 sec and siren burst can be disabled by option P62E 7E.

**PROGRAMMING SEQUENCE:**

**P60E 6E** *toggles the option ON and OFF*

OFF: Auto exclude disabled (instant alarm if unsealed at end of exit time)
ON: Auto exclude enabled (zone is excluded if unsealed at end of exit time)

## P60E 7E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Display is always ON.

**NOTES**

- The LCD keypad display and display backlighting will turn off but the keys backlighting will remain on. The keypad flap can be closed to reduce stray light from the keys.

### DISABLE THE DISPLAY

The LED indicators on the keypad can be programmed to blank after 4 minutes of no keypad use. Any action that causes a beep will restore the display (use the (E) button preferably).

**PROGRAMMING SEQUENCE:**

**P60E 7E** *toggles the option ON and OFF*

OFF: Display is always on
ON: Display will blank after 4 minutes

## P60E 8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: AUX3 and AUX4 outputs are instant.

**RELATED OPTIONS**
P123E 1E, AUX3 output when area1 armed.
P124E 1E, AUX4 output when area2 armed.

### DELAYED ARM1 & ARM2 OUTPUTS

The AUX3 and AUX4 outputs can be programmed to turn on when areas 1 and 2 are armed. These outputs can be programmed to turn on instantly or at the end of exit time.

This option only applies when AUX3 and AUX4 outputs are enabled as arm1 and arm2 outputs, (P123E 1E on and P124E 1E on).

**PROGRAMMING SEQUENCE:**

**P60E 8E** *toggles the option ON and OFF*

OFF: AUX3 and AUX4 outputs turn on instantly, (Default)
ON: AUX3 and AUX4 outputs turn on at the end of exit time

| Option No. | Description | 1E tamper to RESET output | 2E tamper to STROBE output | 3E tamper to keypad SONALERT | 4E tamper to SIREN output | 5E KP Panic to RESET output | 6E KP Panic to STROBE output | 7E KP Panic to keypad SONALERT | 8E KP Panic to SIREN output |
|---|---|---|---|---|---|---|---|---|---|
| P61E | TAMPER & PANIC ALARM MAPPING | ON | ON | ON | ON | ON | ON | ON | ON |

## P61E 1E–4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
1E–4E, ON: tamper alarm triggers all outputs.

**NOTES**
- A tamper alarm can be caused by the TAMP input or by removing the the J1 PROG/TAMP link on the main board.

### TAMPER ALARM / OUTPUT MAPPING

This option selects which outputs will trigger when a tamper alarm occurs.

**PROGRAMMING SEQUENCE:**

**P61E 1E–4E** *toggles the options ON and OFF*

1E ON: tamper alarm to Reset output
2E ON: tamper alarm to strobe output
3E ON: tamper alarm to keypad Sonalert output
4E ON: tamper alarm to Siren output

## P61E 5E–8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
5E–8E, ON: Panic alarm triggers all outputs.

**NOTES**
- A keypad panic alarm can be caused by the PANIC keys on the keypad (* E or ** together, depending on Option P64E6E).

### KEYPAD PANIC ALARM / OUTPUT MAPPING

This option selects which outputs will trigger when a keypad panic alarm occurs.

**PROGRAMMING SEQUENCE:**

**P61E 5E–8E** *toggles the options ON and OFF*

5E ON: keypad panic alarm to reset output
6E ON: keypad panic alarm to strobe output
7E ON: keypad panic alarm to keypad sonalert output
8E ON: keypad panic alarm to siren output

| Option No. | Description | Shortcut MEMORY display 1E | Shortcut ZONE EXCLUDE 2E | Shortcut MONITOR MODE 3E | Shortcut KEYPAD PANIC 4E | Shortcut AREA1 ARMING 5E | Shortcut AREA2 ARMING 6E | Siren burst on Auto-exclude 7E | exit time x10 8E |
|---|---|---|---|---|---|---|---|---|---|
| P62E | OPERATION SHORTCUTS ETC | ON | ON | ON | | ON | | ON | |

## P62E 1E–6E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
1E, ON: Memory Display shortcut enabled.
2E, ON: Zone exclude shortcut enabled.
3E, ON: Monitor mode shortcut enabled.
4E, OFF: keypad panic disabled.
5E, ON: Area1 arming shortcut enabled.
6E, OFF: Area2 arming shortcut disabled.

**NOTES**
- A tamper alarm can be caused by the TAMP input or the J1 link.
- Allocate a user code to area 2 before programming area 2 shortcut arming. If area 2 is shortcut armed then it will always remain armed. This will bar entry into program mode until area 2 is disarmed.

## SYSTEM OPERATION SHORTCUTS

Some keypad operations can be programmed to operate with or without a user code.

**PROGRAMMING SEQUENCE:**

**P62E 1E–6E** *toggles the options ON and OFF*

1E ON: Memory display shortcut
2E ON: Zone exclude shortcut
3E ON: Monitor mode shortcut
4E ON: keypad panic shortcut
5E ON: Area 1 arming shortcut
6E ON: Area 2 arming shortcut

**OPERATING EXAMPLES:**

arming **without shortcut:** (ARM) **[user code]** (E)
arming **with shortcut:** (ARM) (E)
keypad **Panic without** *shortcut:* (*) **[user code]** (E)
keypad **Panic with** *shortcut:* (*) (E)

## P62E 7E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Siren burst on auto exclude enabled.

**RELATED OPTIONS**
P60E 6E Auto exclude zones.

## SIREN BURST ON AUTO EXCLUDE

This option allows the disabling of the 2 second siren burst at the end of exit time which indicates a zone/s has been auto excluded.

**PROGRAMMING SEQUENCE:**

**P62E 7E** *toggles the option ON and OFF*

OFF: Siren burst on auto exclude disabled
ON: Siren burst on auto exclude enabled

## P62E 8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: exit time x10 disabled.

**RELATED OPTIONS**
P28E exit time.

## EXIT TIME X10

This option multiplies the normal exit time by a factor of 10.

**PROGRAMMING SEQUENCE:**

**P62E 8E** *toggles the option ON and OFF*

OFF: Exit time is the time set by P28E
ON: Exit time is multiplied by 10
EXAMPLE: If P28E = 22 seconds then if P62E 8E is ON, the exit time is 22 x 10 = 220 seconds.

| Option No. | Description | 1E monitor to RESET output | 2E monitor to STROBE output | 3E monitor to keypad SONALERT | 4E monitor to SIREN output | 5E Day mode to RESET output | 6E Day mode to STROBE output | 7E Day mode to keypad SONALERT | 8E Day mode to SIREN output |
|---|---|---|---|---|---|---|---|---|---|
| P63E | MONITOR & DAY MODE MAPPING | ON | ON | | | ON | ON | | |

## P63E 1E–4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
1E, 2E ON.
3E, 4E OFF.

**RELATED OPTIONS**
P64E 1E Brief monitor alarm.

### MONITOR MODE OUTPUT MAPPING

This option selects which outputs are triggered by alarms in monitor mode.

**PROGRAMMING SEQUENCE:**

**P63E 1E–4E** *toggles the options ON and OFF*

1E ON: Monitor mode to reset output
2E ON: Monitor mode to strobe output
3E ON: Monitor mode to keypad sonalert output
4E ON: Monitor mode to siren output

## P63E 5E–8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
5E, 6E ON.
7E, 8E OFF.

**RELATED OPTIONS**
P64E 2E Brief Day alarm.

### DAY MODE OUTPUT MAPPING

This option selects which outputs are triggered by alarms in Day mode.

**PROGRAMMING SEQUENCE:**

**P63E 5E-8E** *toggles the options ON and OFF*

5E ON: Day mode to reset output
6E ON: Day mode to strobe output, (If brief day alarm is enabled, (P64E 2E), then this option sends day alarms to the AUX2 output)
7E ON: Day mode to keypad sonalert output
8E ON: Day mode to siren output

**For ZONE TO OUTPUT MAPPING for armed and 24hr states see options P54E – P59E, page 21-22.**

| Option No. | Description | Brief monitor alarm **1E** | Brief Day alarm **2E** | monitor zones have entry delay2 **3E** | radio key chirp **4E** | 50Hz mains frequency **5E** | Double key keypad Panic **6E** | keypad fire alarm **7E** | keypad medical alarm **8E** |
|---|---|---|---|---|---|---|---|---|---|
| P64E | MISC. OPTIONS | | | ON | | ON | ON | | |

## P64E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Brief monitor alarm disabled.

**RELATED OPTIONS**
P51E Set monitor zones.
P63E 1E–4E monitor mode output mapping.

### BRIEF MONITOR MODE ALARM

alarms in monitor mode can either activate the programmed outputs for siren time duration (P29E) or they can activate the outputs for 2 seconds only.

NOTE: If Brief monitor alarm is enabled, then monitor alarms will not be reported by dialler.

**PROGRAMMING SEQUENCE:**

**P64E 1E** *toggles the option ON and OFF*

OFF: Monitor mode outputs have normal time as set by P29E
ON: Monitor mode outputs are ON for 2 seconds only

## P64E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: brief day alarm disabled.

**RELATED OPTIONS**
P53E Assign day zones.
P63E 5E–8E Day mode output mapping.

### BRIEF DAY ALARM

alarms in day mode will activate the programmed outputs while the zone is unsealed or they can activate the outputs for 2 seconds only.

**This option also enables the TEMPORARY DAY ZONE feature. See page 18.**

**PROGRAMMING SEQUENCE:**

**P64E 2E** *toggles the option ON and OFF*

OFF: brief day alarm disabled. Day alarm outputs are ON while the zone is unsealed
ON: brief day alarm Enabled. Day alarm outputs are ON for 2 seconds only

## P64E 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Monitor zones all have entry delay 2.

**RELATED OPTIONS**
P27E Entry delay Time 2.
P51E Assign monitor zones.
P63E 1E–4E monitor mode output mapping.

### MONITOR ZONES ENTRY DELAY 2

monitor zones can either have the delay types set by options P40E–P43E or they can all be assigned to have entry delay 2. This allows all monitor zones to be programmed with the same entry delay time.

**PROGRAMMING SEQUENCE:**

P64E **3E** *toggles the option ON and OFF*

OFF: Monitor zones behave as programmed by P40E–P43E
ON: Monitor zones all have entry delay 2

## P64E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No siren chirps.

**RELATED OPTIONS**
P68E 8E quiet chirps.

### ARM/DISARM CHIRPS

If this option is selected the Siren output will "Chirp" when the panel is armed and disarmed with the keyswitch input or radio keys. This option applies to siren chirps, the strobe output always flashes when arming/disarming by keyswitch or radio key. Setting P64E 4E ON will give 3 chirps on monitor disarm.

The panel will make 1 chirp on arming, and 3 chirps on disarming.

**PROGRAMMING SEQUENCE:**

**P64E 4E** *toggles the option ON and OFF*

OFF: No arm/disarm siren chirps
ON: Siren & strobe outputs will chirp on arm/disarm

## P64E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: 50Hz mains frequency.

### 50Hz MAINS FREQUENCY

Selects either 50Hz or 60Hz mains power frequency operation. Leave the factory default for use in Australia and New Zealand.

Required for the accurate timing of dialler test reports (if programmed). It has no effect on local or other dialler operations.

**PROGRAMMING SEQUENCE:**

**P64E 5E** *toggles the option ON and OFF*

OFF: 60Hz mains frequency
ON: 50Hz mains frequency

## P64E 6E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Double key keypad panic enabled.

**NOTES**
The LCD keypad has two buttons labelled (*) .

**RELATED OPTIONS**
P62E 4E Shortcut keypad panic.

### DOUBLE KEY KEYPAD PANIC

This option allows the keypad Panic alarm to be triggered by pressing both (*) Panic buttons together.

NOTE: (*) **[user code]** (E) always triggers keypad Panic.

**PROGRAMMING SEQUENCE:**

**P64E 6E** *toggles the option ON and OFF*

OFF: No double key keypad Panic
ON: Double key keypad Panic enabled

## P64E 7E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No keypad fire alarm.

**RELATED OPTIONS**
P68E 6E Fire siren sound.
P75E 4E Report fire alarms.

### KEYPAD FIRE ALARM

This option enables the keypad fire alarm. Pressing (3) and then (E) triggers the siren using the “fire alarm” siren sound.

If P75E 4E is enabled, the fire alarm is reported by dialler to the central station.

**PROGRAMMING SEQUENCE:**

**P64E 7E** *toggles the option ON and OFF*

OFF: No keypad fire alarm
ON: keypad fire alarm enabled

## P64E 8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No keypad medical alarm.

**RELATED OPTIONS**
P75E 2E Report medical alarms.

### KEYPAD MEDICAL ALARM

This option enables the keypad medical alarm. Pressing (2) and then (E) activates the dialler and reports a medical alarm.

If P75E 2E must be enabled for the medical alarm to be reported.

**PROGRAMMING SEQUENCE:**

**P64E 8E** *toggles the option ON and OFF*

OFF: No keypad medical alarm
ON: keypad medical alarm enabled

| Option No. | Description | ZONES 1–8 (5400) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | ZONES 9–16 (5400/16CB) 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P65E | SUPERVISED RADIO ZONES | | | | | | | | | | | | | | | | |

## P65E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
all OFF: No radio supervision zones.

**NOTES**
**0E** will turn all selections OFF.
**MEMORY E** will turn all selections ON.

**RELATED OPTIONS**
P66E 1E–6E radio supervision alerts.
P67E radio supervision Time.
P01E–P08E Programming radio devices.
P92E 4E (5400) Report supervision.
P75E 12E (5400/16CB) Report supervision.

## SUPERVISED ZONES

Any zone 1–8 or 9–16 can be a supervised zone.

In operation, a supervised zone is subject to the supervision Time (P67E). If the zone/s has not sealed or unsealed during the supervision Time, then the programmed alerts will turn on (as programmed by P66E 1E-4E, P92E 4E or P75E 12E). Zone supervision can be used as an “inactivity monitor” to sound an alert or send a dialler report if a zone has had no activity during a set period of time, (for example, to monitor an aged person’s home).

• A zone which is permanenlty in a sealed or unsealed state for the duration of supervision Time will be treated as a supervision alarm.

• If P66E 5E is on, zone supervision acts on wired zones. If P66E 5E is off, zone supervision acts on radio zones.

• Each supervised zone has its own supervision timer.

• zone supervision is independent of the armed state of the panel.

• zone supervision can be temporarily disabled by Excluding the zone/s.

• The zone which caused the supervision alarm flashes on the keypad. Entering a valid code + E will reset the supervision alarms.

• If radio supervision is enabled (P66E 5E off), then radio zones are supervised for the absence of a supervision signal as opposed to inactivity of a zone in wired supervision mode (P66E 5E on).

**PROGRAMMING SEQUENCE:**

**P65E [zone No]E** *toggles the options ON and OFF*

[zone No]E OFF: The zone is not a supervised zone
[zone No]E ON: The zone is a supervised zone

## P66E 1E–8E

## RADIO SUPERVISION ALERTS, SUPERVISION TIME SPEEDUP

See pages 31–32.

## P67E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
24hrs.

**NOTES**
- A setting of less than 3 hours is not recommended.
- The supervision timer is reset on exit from installer Program mode, on arm or disarm and on reception of the supervision signal from the particular radio PIR.
- The supervision signal from each supervised radio PIR is individually timed.

**RELATED OPTIONS**
P65E Radio supervision zones.
P66E 1E–6E Radio supervision alerts.
P66E 7E–8E Supervision time speed-up.

See Page 61 for radio device programming.

## SUPERVISION TIME

The SUPERVISION TIME is the time allowed between radio transmissions received by the panel from any supervised radio PIR.

The SUPERVISION TIME setting is from 01 to 24 hours.

**PROGRAMMING SEQUENCE:**

**P67E** *existing time is displayed one digit at a time*

[ENTER NEW TIME] E new time is displayed one digit at a time
EXAMPLE: To program SUPERVISION TIME to be 4 hours:
P67E 04E

**RADIO SUPERVISION**

The purpose of radio supervision is to verify the correct operation of Clipsal radio PIRs. The supervision signal from the radio PIR tells the panel that the device has not been removed from radio range and is in working order.

Non-SUPERVISION radio PIRs can also be programmed and used with the 5400 SUPERVISION TIMERS.

A non-SUPERVISION enabled radio PIR will transmit signals to the panel only when it has detected an event. Obviously, there is no guaranteed signal period.

In either case, when the allowed time limit is exceeded then a WARNING is first given (if programmed by P66E 3E), and then after 1 minute the programmed RADIO SUPERVISION ALERTS are generated by the panel.

NOTE: Manually excluding a supervised zone will also disable radio supervision for that zone.

| Option No. | Description | 1E supervision alarms to RESET output | 2E supervision alarms to STROBE output | 3E supervision alarms to SONALERT output | 4E supervision alarms to SIREN output | 5E | 6E | 7E supervision speedup x6 | 8E supervision speedup x10 |
|---|---|---|---|---|---|---|---|---|---|
| P66E | RADIO SUPERVISION ALERTS | | | | | | | | |

## P66E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Supervision reset output disabled.

**RELATED OPTIONS**
P65E Supervised radio zones.

### RADIO SUPERVISION ALERTS – RESET OUTPUT

Setting this option turns the reset output ON when a SUPERVISED RADIO alert occurs. The reset output will remain ON for the duration of the ALARM TIME (Set by Option P29E).

**PROGRAMMING SEQUENCE:**

**P66E 1E** *toggles the option ON and OFF*

OFF: Supervision reset output disabled
ON: Supervision reset output enabled

## P66E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Supervision strobe output disabled.

**RELATED OPTIONS**
P65E supervised radio zones.

### RADIO SUPERVISION ALERTS – STROBE OUTPUT

Setting this option turns the strobe output ON when a SUPERVISED RADIO alert occurs. The strobe output will remain ON until the panel is disarmed.

**PROGRAMMING SEQUENCE:**

**P66E 2E** *toggles the option ON and OFF*

OFF: Supervision strobe output disabled
ON: Supervision strobe output enabled

## P66E 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Supervision keypad Sonalert disabled.

**NOTES**
- When this option is turned ON, it delays the operation of all other selected supervision outputs by one minute.

**RELATED OPTIONS**
P65E supervised radio zones.

### RADIO SUPERVISION ALERTS – KEYPAD SONALERT & DELAY ALL SUPERVISION OUTPUTS

Setting this option turns the keypad sonalert ON when a SUPERVISED RADIO alert occurs. The keypad sonalert remains ON until *any* keypad key is pressed.

Also, turning this option ON makes all supervision outputs delayed by one minute.

**PROGRAMMING SEQUENCE:**

**P66E 3E** *toggles the option ON and OFF*

OFF: Supervision keypad sonalert disabled and all supervision outputs trigger instantly.
ON: Supervision keypad sonalert enabled and all supervision outputs are delayed by one minute.

## P66E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Supervision Siren output disabled.

**RELATED OPTIONS**
P65E Supervised radio zones.

### RADIO SUPERVISION ALERTS – SIREN OUTPUT

Setting this option turns the siren output ON when a SUPERVISED RADIO alert occurs. The siren output will remain ON for the duration of the ALARM TIME (set by option P29E).

**PROGRAMMING SEQUENCE:**

**P66E 4E** *toggles the option ON and OFF*

OFF: Supervision siren output disabled
ON: Supervision siren output enabled

## P66E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Radio zone supervision enabled.

**RELATED OPTIONS**
P65E Supervised zones.
P66E 1E–4E supervision alerts.
P66E 5E Wired zone supervision.
P67E Zone supervision time.
P92E 4E (5400) Report supervision.
P75E 12E (5400/16CB) Report supervision.

### ENABLED WIRING ZONE SUPERVISION

This option enables wired zone supervision or radio zone supervision.

**PROGRAMMING SEQUENCE:**

**P66E 5E** *toggles the option ON and OFF*

OFF: Radio zone supervision enabled
ON: Wired zone supervision enabled

## P66E 7E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Supervision Time normal.

**RELATED OPTIONS**
P67E supervision Time.
P66E 8E supervision Time speedup x10.

### SUPERVISION TIME SPEEDUP X6

Setting this option speeds up the supervision Time by 6. For instance if P67E is set to 1 hour (60 minutes), then this option will reduce it to 10 minutes (i.e. 60 divided by 6).

**PROGRAMMING SEQUENCE:**

**P66E 7E** *toggles the option ON and OFF*

OFF: Supervision time normal as set by P67E
ON: Supervision time speedup x 6

## P66E 8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Supervision Time normal.

**RELATED OPTIONS**
P67E supervision Time.
P66E 7E supervision Time speedup x6.

P66E 7E & 8E are normally only used for supervision testing purposes

### SUPERVISION TIME SPEEDUP X10

Setting this option speeds up the supervision Time by 10. For instance if P67E is set to 1 hour (60 minutes), then this option will reduce it to 6 minutes. (i.e., 60 divided by 10).

**PROGRAMMING SEQUENCE:**

**P66E 8E** *toggles the option ON and OFF*

OFF: Supervision time normal as set by P67E
ON: Supervision time speedup x10

NOTE: If both P66E 7E and 8E are both ON then the supervision time is sped up by 60. For instance if P67E is set to 1 hour (60 minutes), then this option will reduce it to 1 minute (i.e., 60 divided by 60).

## P67E

**SUPERVISION TIME**, page 28.

## PROGRAMMING

### P68E 1E

**PROGRAM MODE LEVEL:**
installer, remote by pc.

**FACTORY DEFAULT:**
OFF: No zone split.

NOTES:

- zone split is required when zones 9-16 are used as hardwire zones.
- zone split does not have to be enabled to use zones 9-16 as RADIO zones.
- If zone 8 is converted to a keyswitch Input, then a 2K2 monitoring resistor is always used and zone splitting is not available on the Z8 input (no zone 8, zone16). zone 8, zone 16 are still available as RADIO ZONES however. see keyswitch Operation, page 23.
- N.O. contacts can be used only on zones 1 to 8.

**END OF LINE RESISTOR NOTES:**

- Clipsal supplies 1% tolerance metal film resistors for the end of line termination. These are accurate value resistors and they stay accurate long term.
- Avoid using carbon film or 5% tolerance resistors, especially when zone splitting. Problems may not become evident until some time after the installation, due to resistor aging, moisture or dust build up.
- If a particular zone will not seal, then check the resistance of both the low zone and high zone cabling (i.e. if zone 1 will not seal then also check zone 9 wiring). The resistance checks should be done after removing the cabling from the 5400/16CB terminals and separating into their individual wires.
- A 2K2 monitored line should measure between 2100 Ohms minimum and 2400 ohms maximum.
- A 4K7 monitored line should measure between 4600 Ohms minimum and 4950 Ohms maximum.

### INPUT TABLE

| INPUT | ZONE | ZONE |
|---|---|---|
| 1 | 1 | 9 |
| 2 | 2 | 10 |
| 3 | 3 | 11 |
| 4 | 4 | 12 |
| 5 | 5 | 13 |
| 6 | 6 | 14 |
| 7 | 7 | 15 |
| 8 | 8 | 16 |

ZONE SPLIT IS ONLY AVAILABLE ON 5400/16CB CONTROL PANELS.

NOTE 1

The 5400/16CB panel has 16 physical zone inputs, so zone split is usually not required, although you may want to use zone split in cases where:

- Retro-fitting an existing 5400/16CB installation where 4K7 resistors have been used on zones 9–16.
- It may be more convenient to use zone split to avoid running extra cables for zones 9–16. (zone split allows 2 zones to work on 1 zone input.

NOTE 2

If zone split is enabled, physical zone 9–16 inputs cannot be used. they will become inactive.

**ZONE SPLIT**

This option splits zone inputs 1–8 into 16 zones using pairs of zones so that there are 16 wired zones available.

When zone split is enabled, the physical zone inputs 9–16 are ignored by the panel.

Zones 1-8 use 2K2 end of line resistors on the Z1-Z8 inputs.

Zones 9-16 use 4K7 end of line resistors on the Z1-Z8 inputs (with zone 9 connected to the Z1 input etc).

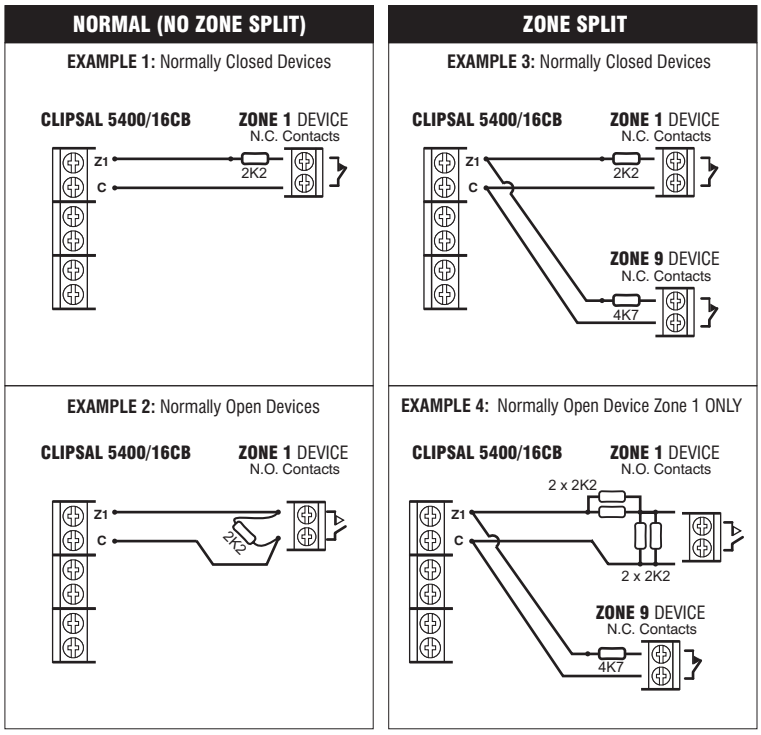
The monitoring resistors must be wired in parallel, making this zone splitting arrangement suitable for normal closed (N.C.) detectors.

**PROGRAMMING SEQUENCE:**

**P68E 1E** *toggles the option ON and OFF*

OFF: No zone split
ON: Zone split enabled

**CONNECTION DIAGRAMS**




Normally open (N.O.) wiring is possible only on zones 1 to 8. This is done by splitting the 2K2 resistor into 2 x 1K1 resistors, joining them in series, and then placing the N.O. contact across one of the 1K1 resistors. (Make a 1K1 resistor by wiring 2 x 2K2 resistors in parallel.)

| Option No. | Description | 1E ZONE SPLIT (5400/16CB only) | 2E 3K3 resistors | 3E | 4E | 5E radio key arming unsealed warning | 6E 24hr zone FIRE SIREN sound | 7E | 8E QUIET CHIRPS on arm/disarm |
|---|---|---|---|---|---|---|---|---|---|
| P68E | MISC. OPTIONS | | | | | | | | |

### 3K3 ZONE RESISTORS

Setting this option ON changes the zones 1 – 8 monitoring resistor from 2K2 to 3K3. (External tamper input always uses a 2K2 resistor.)

**PROGRAMMING SEQUENCE:**

**P68E 2E** *toggles the option ON and OFF*

OFF: 3K3 zone resistors disabled
ON: 3K3 zone resistors enabled

## P68E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Radio key siren warning disabled.

### RADIO KEY ARMING, UNSEALED ZONE WARNING

Setting this option ON allows a 2 second SIREN warning if there is an unsealed zone in an area armed by a radio key.

**PROGRAMMING SEQUENCE:**

**P68E 5E** *toggles the option ON and OFF*

OFF: Radio key arming, siren warning disabled
ON: Radio key arming, siren warning enabled

## P68E 6E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No 24hr Fire siren sound.

**NOTES**

- The keypad key sequence for FIRE (3 E) always outputs the FIRE siren sound.

### 24HR ZONE FIRE SIREN SOUND

This option changes the siren sound when a 24hr zone is triggered.

**PROGRAMMING SEQUENCE:**

**P68E 6E** *toggles the option ON and OFF*

OFF: Fire siren sound disabled
ON: Fire siren sound enabled

## P68E 8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Quiet chirps disabled.

**NOTES**
**RELATED OPTIONS:**
**P64E 4E** arm/disarm Chirps.

### QUIET CHIRPS ON ARM/DISARM

This quietens the siren chirps that are made whenever keyswitch or radio key arming or disarming is used. (arm/disarm Chirps must be enabled at P64E 4E.)

**PROGRAMMING SEQUENCE:**

**P68E 8E** *toggles the option ON and OFF*

OFF: Quiet chirps disabled
ON: Quiet chirps enabled

| Option No. | Description | 1E ARM1 pulse output | 2E ARM2 pulse output | 3E Quiet monitor siren | 4E 6 beeps on arming | 5E radio key arming of monitor mode | 6E Disable Mains Fail alarm | 7E | 8E |
|---|---|---|---|---|---|---|---|---|---|
| P69E | MISC. OPTIONS 2 | | | | | | | | |

## P69E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: ARM1 output toggles.

**NOTES**
- This is useful as a smoke detector reset output with an optional external relay.

**RELATED OPTIONS**
P60E 8E Delay ARM1/ARM2 outputs
P123E 1E, AUX3 output when area1 armed.

### AUX3 (ARM1) PULSE OUTPUT

This option selects the AUX3 output to pulse on for 2 seconds whenever arming or disarming of area 1 (the AUX3 output normally toggles when arming/disarming).

Note also that when arming with the P60E 8E option selected that the pulse will occur at the end of exit time. This option only applies when AUX3 output is enabled as arm 1 output, (P123E 1E on).

**PROGRAMMING SEQUENCE:**

**P69E 1E** *toggles the option ON and OFF*

OFF: AUX3 output toggles
ON: AUX3 output pulses

## P69E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: ARM2 output toggles.

**NOTES**
- This is useful as a Smoke Detector reset output with an optional external relay.

**RELATED OPTIONS**
P60E 8E Delay ARM1/ARM2 outputs
P124E 1E, AUX4 output when area2 armed.

### AUX4 (ARM2) PULSE OUTPUT

This option selects the AUX4 output to pulse on for 2 seconds whenever arming or disarming area 2. (The AUX4 output normally toggles when arming/disarming).

Note also that when arming with the P60E 8E option selected that the pulse will occur at the end of exit time. This option only applies when AUX4 output is enabled as arm 2 output, (P124E 1E on).

**PROGRAMMING SEQUENCE:**

**P69E 2E** *toggles the option ON and OFF*

OFF: AUX4 output toggles
ON: AUX4 output pulses

## P69E 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Normal siren sound in monitor mode.

**NOTES**
- This does not affect the RESET output.

### QUIET MONITOR SIREN

This option selects the 'quiet siren' sound in monitor mode. The quiet siren sound is a continuous "beep, beep, beep" sound rather than the normal siren sound.

**PROGRAMMING SEQUENCE:**

**P69E 3E** *toggles the option ON and OFF*

OFF: Normal siren sound in monitor mode
ON: Quiet siren sound in monitor mode

## P69E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: keypad gives 3 beeps on arming.

**NOTES**
- The keypad beeps on arm/disarm when arming/disarming by keypad, keyswitch or by radio key.

### 6 BEEPS ON ARMING

Normally the keypad/s onboard SONALERT gives 3 beeps when the panel is armed. Turning this option ON will give 6 keypad beeps when arming.

**PROGRAMMING SEQUENCE:**

**P69E 4E** *toggles the option ON and OFF*

OFF: keypad gives 3 beeps on arming
ON: keypad gives 6 beeps on arming

## P69E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Radio keys cannot arm monitor mode

**NOTES**
- Radio key monitor arming will work only if one or more zones have been programmed as monitor zones (P51E).
- When using a radio keypad to monitor arm, ensure that the ARM ONLY option is OFF for the USER code on the panel. Otherwise further MONITOR E keypresses on the radio keypad could AREA arm the panel.

### RADIO KEY MONITOR ARMING

Setting this option on allows MONITOR mode arming by radio key.

**PROGRAMMING SEQUENCE:**

**P69E 5E** *toggles the option ON and OFF*

OFF: Radio key monitor mode arming disabled
ON: Radio key monitor mode arming enabled

**OPERATION:**

**Panel version 4**

Press the radio key OFF button twice within 4 seconds.

**Panel version 4.5 and later**

- Press the radio key OFF button twice within 4 seconds.

or.... - Press the radio key ON button twice within 5 seconds.

## P69E 6E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Mains fail alarm normal.

**NOTES**
- This does not affect dialler mains fail reporting or saving to the history memory or operation of the mains fail output on the output expander.

### DISABLE MAINS FAIL ALARM

When set ON, a mains fail alarm is:

1. Not displayed on the keypad,

2. Does not give warning beeps, 3. Is not saved to MEMORY and the MEMORY display does not flash.

**PROGRAMMING SEQUENCE:**

**P69E 6E** *toggles the option ON and OFF*

OFF: Mains fail alarm operates normally
ON: Mains fail alarm is disabled

| Option No. | Description | Default |
|---|---|---|
| P70E | TELEPHONE NUMBER 1 - PRIMARY | |
| P71E | TELEPHONE NUMBER 2 - SECONDARY | |
| P80E | TELEPHONE NUMBER 3 - TEST CALLS | |
| P81E | TELEPHONE NUMBER 4 - CALLBACK FOR UPLOAD | |
| P00E | FOLLOW-ME TELEPHONE NUMBER - For audible dialling | |
| P72E | ACCOUNT NUMBER 1 | 0000 |
| P73E | ACCOUNT NUMBER 2 | 0000 |

## P70E, P71E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
No telephone numbers.

**NOTES**
- If telephone number 2 is disabled, all calls are made on telephone number 1 and the setting of P87E 1E has no effect.
- If telephone number 3 is disabled, all test calls are made on telephone number 1and 2
- Any keypress will stop the telephone number display sequence.

**RELATED OPTIONS**
P87E 1E Alternate primary/secondary telephone numbers.

P86E 1E Disable dialler (still allows remote up/download if programmed).

### TELEPHONE NUMBERS 1 & 2

The panel can dial up to 2 phone numbers when an event is to be transmitted to a central monitoring station or other location. Telephone numbers may be up to 15 digits in length.

**PROGRAMMING SEQUENCE:**

**P70E** *existing telephone number is displayed one digit at a time*

[ENTER NEW TELEPHONE No] E new telephone number is displayed one digit at a time
EXAMPLE: To program Telephone No.1 to be 03 1234 1234:
P 70 E 0312341234 E

### SPECIAL FUNCTIONS FOR ALL TELEPHONE NUMBERS

**TO CLEAR A TELEPHONE NUMBER**

To clear a telephone number, enter the MEMORY key in place of the telephone number.

Example, to clear a telephone number 1 press: P70E MEMORY E.

**SPECIAL CHARACTERS (Applies to all telephone Numbers)**

Pauses, * (star) or # (hash) (VF digits) can be included in the dialling sequence by using the keys in the table below.

| SPECIAL CHARACTER LCD DISPLAY | KEY ENTRY | DISPLAYED ON |
|---|---|---|
| PAUSE (1.6sec) | ARM key | 12 |
| * (Star) | MONITOR key | 10 |
| # (Hash) | EXCLUDE key | 11 |

## P72E, P73E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
P72E Account No.1: 0000.
P73E Account No.2: 0000.

**RELATED OPTIONS**
P79E Account No.2 zones.
Also see page 38, HEX client codes.

### ACCOUNT NUMBER 1 & 2

Account numbers for identifying the panel to the central station. Area 1 open/close reports will report on account No.1 and area 2 open/close reports will report on account No.2.

Zone alarms can be assigned to report on either account number as set by option P79E.

All miscellaneous events (eg. tampers, mains fail) will report on account No. 1.

**PROGRAMMING SEQUENCE:**

**P72E (or P73E)** *existing account number is displayed one digit at a time*

[ENTER NEW ACCOUNT No] E new account number is displayed one digit at a time
EXAMPLE: To program Account No.1 to be 1239:
P72E1239E

**HEX CLIENT CODE NOTES**

Note 1: If using the Clipsal LED keypad for programming, the HEX digits will not be displayed but are still programmed.

Note 2: HEX digit A is not allowed.

**HEX CLIENT codes**

Dialler client codes can now be entered in HEXadecimal. Use the following keys to enter the hex digits B, C, D, E or F.

| HEX DIGIT | KEY ENTRY | DISPLAYED ON LCD DISPLAY |
|---|---|---|
| B | * key | 11 |
| C | ARM key | 12 |
| D | MONITOR key | 13 |
| E | EXCLUDE key | 14 |
| F | MEMORY key | 15 |

## P80E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
No telephone numbers.

**RELATED OPTIONS**
**P89E 1E** Enable test calls.
**P83E** Test call interval.
**P84E** Test call start delay.

## P81E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
No telephone numbers.

**RELATED OPTIONS**
P90E 8E Enable Callback.

## P00E

**PROGRAM MODE LEVEL**
User, Installer, remote by PC.

**FACTORY DEFAULT**
No telephone numbers.

**NOTES**
- If the 'follow me' telephone number is disabled, all audible format calls are made on telephone numbers 1 & 2.

**RELATED OPTIONS**
P86E 3E audible DTMF format.
P86E 4E audible pulse format.
P86E 5E Contact ID + audible DTMF.
P86E 6E Contact ID + audible Pulse.

### TELEPHONE NUMBER 3

### TEST CALLS

Phone Number 3 is used to send test calls. If it is not programmed then test calls are sent using telephone No 1 and 2.

**PROGRAMMING SEQUENCE:**

**P80E** *existing telephone number is displayed one digit at a time*

[ENTER NEW TELEPHONE No] E new telephone number is displayed one digit at a time
EXAMPLE: To program telephone No.3 to be 03 2468 1234:
P80E0324681234E

### TELEPHONE NUMBER 4 – CALLBACK

Phone number 4 is used to prevent unauthorised up/download.

The panel will dial the callback telephone number to commence a up/download session.

Up/download without callback is allowed by turning off option P90E 8E.

**PROGRAMMING SEQUENCE:**

**P81E** *existing telephone number is displayed*

[ENTER NEW TELEPHONE No] E new Telephone No.4 is displayed one digit at a time

### FOLLOW ME TELEPHONE NUMBER

The 'follow me' telephone number is only used in audible Dialling mode. (If P86E 3E, 4E, 5E or 6E are on).

The 'follow me' telephone number can be programmed in user Program mode. If the 'follow me' number is programmed, then the primary and secondary numbers are ignored.

**IF P86E 3E or 4E ARE ENABLED (AUDIBLE MONITORING)**

If the 'follow me' number is programmed, the primary and secondary numbers are ignored.

**IF P86E 5E or 6E ARE ENABLED (CONTACT ID + AUDIBLE)**

The telephone numbers programmed at P70E and P71E will be used to send the mesage to the central station. The message is also repeated in audible format to the telephone number (if any) programmed at P00E.

**PROGRAMMING SEQUENCE:**

**P00E** *existing telephone number is displayed one digit at a time*

[ENTER NEW TELEPHONE No] E new telephone number is displayed one digit at a time

| Option No. | Description | ZONES 1–8 (5400) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | ZONES 9–16 (5400/16CB) 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P74E | REPORT ZONE ALARMS | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P76E | REPORT ZONE RESTORALS | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON |
| P78E | MULTIPLE ZONE ALARMS | | | | | | | | | | | | | | | | |
| P79E | ACCOUNT NUMBER 2 ZONES | | | | | | | | | | | | | | | | |

## P74E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All zones report alarms.

**NOTES**
- **0E** will turn all selections OFF
- **MEMORY E** will turn all selections ON.

## P76E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All zones report restorals.

**NOTES**
- **0E** will turn all selections OFF.
- **MEMORY E** will turn all selections ON.

**RELATED OPTIONS**
P82E 1E Send restoral immediately.
P82E 2E Send restoral after siren time.
P82E 3E Send restoral on disarm and seal.
P82E 4E Send restoral on disarm always.

## P78E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
No zones report multiple alarms.

**NOTES**
- Only zones that have previously sent an alarm will send a restoral.
- **0E** will turn all selections OFF.
- **MEMORY E** will turn all selections ON.

**RELATED OPTIONS**
P89E 4E Swinger shutdown.

## P79E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
None.

### REPORT ZONE ALARMS

This option selects which zone inputs will send alarm reports to the central station.

**PROGRAMMING SEQUENCE:**

**P74E [zone No]E** *toggles the option ON and OFF*

[zone No]E OFF: alarm reporting disabled for that zone
[zone No]E ON: alarm reporting enabled for that zone

### REPORT ZONE RESTORALS

This option selects which zone inputs will send restoral reports to the central station. Only zones that have previously sent an alarm will send a restoral.

**PROGRAMMING SEQUENCE:**

**P76E [zone No]E** *toggles the option ON and OFF*

[zone No]E OFF: restoral reporting disabled for that zone
[zone No]E ON: restoral reporting enabled for that zone

### REPORT MULTIPLE ZONE ALARMS

zones selected for multiple zone alarms will report each time the zone alarms and without a restore being sent. The number of reports is a maximum of 15. The number of alarms sent for each multiple zone alarm can be reduced to 3 by using the swinger shutdown option P89E 4E.

zones not selected report only once, until reset by an opening or valid code.

**PROGRAMMING SEQUENCE:**

**P78E [zone No]E** *toggles the option ON and OFF*

[zone No]E OFF: Multiple zone alarms disabled for that zone
[zone No]E ON: Multiple zone alarms enabled for that zone

### ACCOUNT NO.2 ZONES

Zones selected to be account No.2 zones will report their alarms, restorals and excludes on client code 2.

**PROGRAMMING SEQUENCE:**

**P79E [zone No]E** *toggles the option ON and OFF*

## P75E, P92E

**REPORT MISCELLANEOUS ALARMS**
**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
see table

**NOTES**
- **0E** will turn all selections OFF
- **MEMORY E** will turn all selections ON

## P77E, P93E

**REPORT MISCELLANEOUS RESTORALS**
**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
See table.

| | ALARM DEFAULT | RESTORAL DEFAULT | 5400 | | | |
|---|---|---|---|---|---|---|
| | | | ALARM | | RESTORAL | |
| Duress | | ON | P75E | 1E | P77E | 1E |
| Medical | | ON | P75E | 2E | P77E | 2E |
| KP Panic & KS Panic | ON | ON | P75E | 3E | P77E | 3E |
| Fire | | ON | P75E | 4E | P77E | 4E |
| Panel tamper | ON | ON | P75E | 5E | P77E | 5E |
| External tamper | ON | ON | P75E | 6E | P77E | 6E |
| keypad tamper | ON | ON | P75E | 7E | P77E | 7E |
| Exit installer mode | | ON | P75E | 8E | P77E | 8E |
| radio tamper | ON | ON | P92E | 1E | P93E | 1E |
| radio Panic | ON | ON | P92E | 2E | P93E | 2E |
| radio Battery | | ON | P92E | 3E | P93E | 3E |
| supervision fail | | ON | P92E | 4E | P93E | 4E |
| Panel battery | | ON | P92E | 5E | P93E | 5E |
| Mains fail | | ON | P92E | 6E | P93E | 6E |
| [not used] | | ON | P92E | 7E | P93E | 7E |
| [not used] | | ON | P92E | 8E | P93E | 8E |

### REPORT MISCELLANEOUS ALARMS
### REPORT MISCELLANEOUS RESTORALS

These options select which miscellaneous alarms will trigger the dialler to send alarm reports and restoral reports to the central station.

Alarms (if enabled) are sent on activation. restorals (if enabled) are sent on opening. Mains fail and low battery restorals are sent when the power has been restored.

NOTE: The different program option numbers for the 5400 and 5400/16CB.

**PROGRAMMING SEQUENCE:**

**PxxE**

1E–8E toggles the option ON and OFF

| Option No. | Description | 1E Send immediately | 2E Send after siren time | 3E Send after disarm & seal | 4E Send after disarm always | 5E | 6E | 7E | 8E |
|---|---|---|---|---|---|---|---|---|---|
| P82E | ZONE RESTORAL REPORTING OPTIONS | | | | ON | | | | |

## P82E 1E–4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
4E, ON: Always send restoral on disarm.

**RELATED OPTIONS**
P76E Report zone restorals.

### RESTORAL REPORTING OPTIONS

This option selects when the dialler sends zone restoral reports. Only one of the following options may be selected.

Restoral reporting options also apply to 24hr zones.

**PROGRAMMING SEQUENCE:**

**P82E 1E–4E** *toggles the option ON and OFF*

1E ON: Send restoral immediately
2E ON: Send restoral after siren time
3E ON: Send restoral on disarm and seal
4E ON: Send restoral on disarm always

| Option No. | Description | Default | Note |
|---|---|---|---|
| P83E | TEST CALL INTERVAL | 84 | x 2 = 168hrs |
| P84E | TIME BEFORE FIRST TEST CALL | 6 | x 2 = 12hrs |

## P83E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
84 (=168hrs =7 days).

**NOTES**
- Enter a value from 1 to 99.

**RELATED OPTIONS**
P89E 1E Enable Test Calls.
P84E Time Before Next Test Call.

### TEST CALL INTERVAL

Test calls to the central station can be sent at intervals between 2 and 198 hours in 2 hour increments.

Programmable from 2 to 198 hours. Enter a value between 1 and 99. (This is automatically multiplied by 2).

Test Calls must be enabled by option P89E 1E.

**PROGRAMMING SEQUENCE:**

Press **P83E** *(The existing Test Call Interval time will be displayed.)*

Press **[NEW TIME] E** (The new test call Interval time will be displayed.)

EXAMPLE: To program daily test calls.

Press **P83E12E**

## P84E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
6 (=12hrs).

**NOTES**
- Enter a value from 1 to 99.
- If test calls are to start immediately, then the value is set to 0.
- The time before next test call is constantly updated. When viewed, the current value will be displayed (not the initially entered value).

**RELATED OPTIONS**
P89E 1E, Enable Test Calls.
P83E, Test call interval.

### TIME BEFORE FIRST TEST CALL

This option sets the time before the first test call and is used to set the preferred time for test calls. Programmable from 2 to 198 hours. Enter a value between 1 and 99. (This is automatically multiplied by 2).

EXAMPLES:

**New Installation:** Set the time before the first test call.
E.g. If you are programming the panel at 5pm and you want test calls to be sent at 1am, enter P84E 4E (4 x 2 =8hrs, therefore 5pm + 8hrs =1am).

**B/ Existing Installation:** To reset the time that test calls are sent.
E.g. Our example panel is sending test calls at 1am and you want to change it to 2am. If you are programming the panel at 6pm, enter P84E 4E (4 x 2 =8hrs, therefore 6pm + 8hrs =2am).

**PROGRAMMING SEQUENCE:**

Press **P84E** *(The existing time before first test call will be displayed. See note 3)*

Press **[NEW TIME] E** (The new time before first test call will be displayed)

| Option No. | Description | Auto select **1E** | PULSE dialling always **2E** | DTMF dialling always **3E** | **4E** | **5E** | **6E** | **7E** | **8E** |
|---|---|---|---|---|---|---|---|---|---|
| P85E | DIALLING METHOD | | | ON | | | | | |

## P85E 1E–3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
3E ON: DTMF dialling always.

**NOTES**
- Only one option is allowed to be ON
- **THE DECADIC (OR PULSE) DIALLING ON THIS DEVICE IS UNSUITABLE FOR USE ON THE TELECOM NETWORK IN NEW ZEALAND.**

### DIALLING METHOD

The dialler can be set to dial in PULSE (Decadic) or DTMF dialling or auto select depending on dial tone. Factory default is DTMF dialling.

**This option should not be changed for use in Australia, New Zealand or Europe.**

**PROGRAMMING SEQUENCE:**

**P85E 1E–3E** *turns the option ON*

1E ON: Auto Select Dialling (PULSE or DTMF)
2E ON: Pulse Dialling always
3E ON: DTMF Dialling always

| Option No. | Description | 1E Disable Dialler | 2E Contact ID Format | 3E audible DTMF format | 4E audible PULSE format | 5E Contact ID + audible DTMF | 6E Contact ID + audible DTMF | 7E | 8E |
|---|---|---|---|---|---|---|---|---|---|
| P86E | REPORTING FORMATS | | ON | | | | | | |

## P86E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: dialler enabled.

**NOTES**
- This option is useful for temporary disabling of the dialler without affecting other dialler options.
- Only one option in the range P86E 1E–6E is allowed to be ON.

### DISABLE DIALLER

This option disables the dialler even if telephone numbers and other dialler options are programmed.

Up/download or remote telephone access remain enabled.

**PROGRAMMING SEQUENCE:**

**P86E 1E** *turns the option ON*

ON: Dialler disabled

## P86E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Contact ID format enabled.

**NOTES**
- Only one option in the range P86E 1E–6E is allowed to be ON.

### CONTACT ID FORMAT

This option enables the reporting of alarms to central station via telephone numbers 1 and 2 using Contact ID format.

**PROGRAMMING SEQUENCE:**

**P86E 2E** *turns the option ON*

ON: Contact ID format enabled

## P86E 3E

**PROGRAM MODE LEVEL**

Installer, remote by PC.

**FACTORY DEFAULT**

OFF.

**NOTES**

- Only one option in the range P86E 1E–6E is allowed to be ON.

### AUDIBLE DTMF FORMAT

For audible monitoring to any telephone or mobile phone. The last digit of the Account number and the zone alarm are sent in audible DTMF format.

The message is repeated for 45 seconds or until kissed-off by the receiving telephone.

**PROGRAMMING SEQUENCE:**

**P86E 3E** *turns the option ON*

ON: audible DTMF format enabled

## P86E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF.

**NOTES**
- Only one option in the range P86E 1E–6E is allowed to be ON.
- This is the best option to select for audible monitoring.

### AUDIBLE PULSE FORMAT

For audible monitoring to any telephone or mobile phone. The last digit of the account number and the zone alarm are sent in audible PULSE format.

The message is repeated for 45 seconds or until kissed-off by the receiving telephone.

**PROGRAMMING SEQUENCE:**

**P86E 4E** *turns the option ON*

ON: audible PULSE format enabled

## P86E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF.

**NOTES**
- Only one option in the range P86E 1E–6E is allowed to be ON.

### CONTACT ID + AUDIBLE DTMF FORMAT

For simultaneous central station and audible monitoring.

The alarm message will be sent to the central station on the primary telephone number and then in audible DTMF format to the 'follow me' telephone number.

**PROGRAMMING SEQUENCE:**

**P86E 5E** *turns the option ON*

ON: Contact ID + audible DTMF format enabled

## P86E 6E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF.

**NOTES**
- Only one option in the range P86E 1E–6E is allowed to be ON.

### CONTACT ID + AUDIBLE PULSE FORMAT

For simultaneous central station and audible monitoring.

The alarm message will be sent to the central station on the primary telephone number and then in audible PULSE format to the 'follow me' telephone number.

**PROGRAMMING SEQUENCE:**

**P86E 6E** *turns the option ON*

ON: Contact ID + audible PULSE format enabled

The panel reports alarms to the central station using contact ID dialler format.

The message format is fixed as shown in the contact ID codes table.

**THE MESSAGE TAKES THE FORM OF:**

| | |
|---|---|
| **SSSS** | Account number |
| **Q** | Event qualifier<br>1=New Event or Open<br>3=Restore or Close |
| **XYZ** | Alarm type |
| **GG** | Group or area designation |
| **CCC** | Alarm number |

dd=user ID (1 to 56)

zz = zone ID (1 to 16)

aa = 01 area 1

aa = 02 area 2

aa = 01 monitor area

aa = 00 24 Hr area

K = Checksum (0 to 0f hex)

### CONTACT ID CODES TABLE

| REPORT NAME | SSSS | Q | XYZ | GG | CCC | SUFFIX |
|---|---|---|---|---|---|---|
| zone 1– zone 16 alarm | ssss 18 | q | **130** | aa | 001–016 | k |
| Duress | ssss 18 | 1 | **121** | 01 | 030 | k |
| keyswitch panic | ssss 18 | 1 | **120** | 01 | 031 | k |
| keypad panic | ssss 18 | 1 | **120** | 01 | 032 | k |
| Radio key panic | ssss 18 | 1 | **120** | 01 | 1dd | k |
| Medical alarm | ssss 18 | 1 | **100** | 01 | 033 | k |
| Fire | ssss 18 | 1 | **110** | 01 | 034 | k |
| Exit Install mode | ssss 18 | 1 | **306** | 01 | 035 | k |
| External tamper | ssss 18 | q | **137** | 01 | 040 | k |
| Internal tamper | ssss 18 | q | **137** | 01 | 041 | k |
| keypad tamper | ssss 18 | q | **137** | 01 | 042 | k |
| Radio sensor supervision | ssss 18 | q | **381** | 01 | 4zz | k |
| Radio sensor tamper | ssss 18 | q | **383** | 01 | 2zz | k |
| Radio sensor low battery | ssss 18 | q | **384** | 01 | 3zz | k |
| Mains fail | ssss 18 | q | **301** | 01 | 050 | k |
| Panel battery fail | ssss 18 | q | **309** | 01 | 051 | k |
| Open | ssss 18 | 1 | **402** | aa | 0dd | k |
| Force open (Cancel) | ssss 18 | 1 | **406** | aa | 0dd | k |
| Close | ssss 18 | 3 | **402** | aa | 0dd | k |
| Test report | ssss 18 | 1 | **602** | 01 | 063 | k |
| zone 1-16 Manual exclude | ssss 18 | q | **573** | aa | 001-016 | k |
| zone 1-16 Auto exclude | ssss 18 | q | **380** | aa | 001-016 | k |

keyswitch arming is identified as user 57. Shortcut arming is identified as user 58.

| Option No. | Description | 1E Spilt dial | 2E Check for dial tone | 3E | 4E 4 dialling attempts | 5E | 6E | 7E | 8E |
|---|---|---|---|---|---|---|---|---|---|
| P87E | MISC. DIALLING OPTIONS | | ON | | ON | | | | |

## P87E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Alternate dial.

**RELATED OPTIONS**
P87E 4E Number of dialling attempts.

### SPLIT DIAL PRIMARY/SECONDARY PHONE NUMBERS

This option selects the order in which telephone numbers 1 and 2 are dialled.

**PROGRAMMING SEQUENCE:**

**P87E 1E** *toggles the option ON and OFF*

OFF: Alternate dial. Dial telephone No.1 on the first attempt.
If no answer, dial telephone No.2
Continue alternating until successful
ON: Split dial. Dial telephone No.1 for half of the call attempts
If unsuccessful, dial telephone No.2 for the last half of call attempts

## P87E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Dial only with dial tone.

### CHECK FOR DIAL TONE

The dialler normally dials only if a dial tone is detected. The dialler can be forced to dial without a dial tone. Allows use on PABXs with non-standard dial tones.

**PROGRAMMING SEQUENCE:**

**P87E 2E** *toggles the option ON and OFF*

OFF: Dial without dial tone
ON: Dial only with dial tone

## P87E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: 4 dialling attempts.

**NOTES**

- Sets the total number of dialling attempts. E.g. If 4 dialling attempts is selected, this means 2 attempts per telephone number.

**RELATED OPTIONS**
P87E 1E Alternate dialling.

### NUMBER OF DIALLING ATTEMPTS

Sets the number of dialling attempts when sending reports.

OFF: Sets a maximum 10 dial attempts before a 5 minute sleep and 10 more retries if unsuccessful.

ON: Allows a maximum of 4 dial attempts before a 5 minute sleep and 4 more retries if unsuccessful.

If all attempts fail the dialler waits for the next trigger event. The previously unsuccessful report will be included in the new message.

When sending test calls, the time between dialling attempts increases to 60 minutes for the second round of dialling. If a test call is unsuccessful after the first round of calls are made, another call is made after 5 minutes. If this call fails then subsequent calls are made every hour (up to the maximum number of calls).

**PROGRAMMING SEQUENCE:**

**P87E 4E** *toggles the option ON and OFF*

OFF: Maximum 10 dialling attempts
ON: Maximum 4 dialling attempts

| Option No. | Description | AREA1 open/close report 1E | AREA2 open/close report 2E | Chirp siren on kiss-off 3E | Flash strobe on kiss-off 4E | Forced opening report 5E | Delay closing report 6E | Manual exclude report 7E | Auto exclude report 8E |
|---|---|---|---|---|---|---|---|---|---|
| P88E | OPEN/CLOSE REPORTING OPTIONS | | | | | ON | | ON | ON |

## P88E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No AREA1 open/close reports.

### AREA1 OPEN/CLOSE REPORTS

Enables or disables sending of AREA1 open/close reports.

The user ID of the code used is included in the report.

keyswitch arming is identified as user 57. Shortcut arming is identified as user 58.

**PROGRAMMING SEQUENCE:**

**P88E 1E** *toggles the option ON and OFF*

OFF: No AREA1 *open/close* reports
ON: AREA1 open/close reports enabled

## P88E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No AREA2 open/close.

### AREA2 OPEN/CLOSE REPORTS

Enables or disables sending of AREA2 open/close reports.

**PROGRAMMING SEQUENCE:**

**P88E 2E** *toggles the option ON and OFF*

OFF: No AREA2 open/close reports
ON: AREA2 open/close reports enabled

## P88E 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No Siren chirp on kiss-off.

**RELATED OPTIONS**
P88E 4E Flash strobe on kiss-off.

### SIREN CHIRP ON KISS-OFF

Selects a 2 Second Siren burst on a successful Closing report. This is used to give audible indication that the dialler has successfully sent the arming report.

**PROGRAMMING SEQUENCE:**

**P88E 3E** *toggles the option ON and OFF*

OFF: No Siren Chirp on kiss-off
ON: Siren Chirp on kiss-off enabled

## P88E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No strobe flash on kiss-off.

**RELATED OPTIONS**
P88E 3E Siren chirp on kiss-off.

### STROBE FLASH ON KISS-OFF

Selects a 2 second strobe on a successful closing report. This is used to give visual indication that the dialler has successfully sent the arming report.

**PROGRAMMING SEQUENCE:**

**P88E 4E** *toggles the option ON and OFF*

OFF: No strobe flash on kiss-off
ON: strobe flash on kiss-off enabled

## P88E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Forced opening reports enabled

**NOTES**
- This option is used to indicate to the central station that an alarm has been reset by a valid user.
- Usually used in cases where open/close reports are normally selected OFF.

### FORCED OPENING REPORT

If Forced Opening Report is selected ON – when an alarm has been reset by a valid user code (or radio key), the dialler will send an Opening report along with a restoral report for the zone or miscellaneous input which caused the alarm.

**PROGRAMMING SEQUENCE:**

**P88E 5E** *toggles the option ON and OFF*

OFF: No Forced opening Reports
ON: Forced opening Reports enabled

## P88E 6E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Closing reports sent on arming.

**RELATED OPTIONS**
P88E 1E AREA1 open/close reports.
P88E 2E AREA2 open/close reports.

### DELAY CLOSING REPORT

If selected ON, Closing reports (if enabled) are sent at the end of exit time. Normally, Closing reports are sent immediately on arming.

**PROGRAMMING SEQUENCE:**

**P88E 6E** *toggles the option ON and OFF*

OFF: Closing reports sent on arming
ON: Closing reports sent at end of exit time

## P88E 7E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Manual exclude reports enabled.

**RELATED OPTIONS**
P88E 8E Auto exclude reports.

### MANUAL EXCLUDE REPORT

Enables Manual exclude Reports for zones. Exclude reports for 24hr zones are sent on exiting EXCLUDE mode.

**PROGRAMMING SEQUENCE:**

**P88E 7E** *toggles the option ON and OFF*

OFF: No manual exclude reports
ON: Manual exclude reports enabled

## P88E 8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Auto exclude reports enabled.

**RELATED OPTIONS**
P88E 7E Manual exclude reports.

### AUTO EXCLUDE REPORT

Enables Auto exclude reports for zones. Zones not sealed on arming will be reported as auto excluded.

**PROGRAMMING SEQUENCE:**

**P88E 8E** *toggles the option ON and OFF*

OFF: No auto exclude reports
ON: Auto exclude reports enabled

| Option No. | Description | 1E Enable Test Calls | 2E Mains Report Delay | 3E Listen-in to dialler | 4E Swinger shutdown | 5E Line Fault monitor | 6E | 7E Internal timing | 8E |
|---|---|---|---|---|---|---|---|---|---|
| P89E | MISC. REPORTING OPTIONS | ON | ON | | ON | | | | |

## P89E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Test Calls enabled.

**RELATED OPTIONS**
P83E Test call interval.
P84E Time before next test call.
P87E 4E Number Of dialling attempts.

### ENABLE TEST CALLS

This option enables the reporting of dialler test calls to the central station.

**PROGRAMMING SEQUENCE:**

**P89E 1E** *toggles the option ON and OFF*

OFF: No test calls
ON: Test calls enabled

## P89E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Mains fail report is delayed.

### MAINS REPORT DELAY

This option allows Mains Fail reports to be delayed by one hour if the mains power has been off continuously for that time. This avoids mains fail reports being sent to the central station in the event of brief power failures.

**PROGRAMMING SEQUENCE:**

**P89E 2E** *toggles the option ON and OFF*

OFF: Mains fail reports immediately
ON: Mains fail report is delayed by 1 hour

## P89E 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No listen–In.

**NOTES**

- Use METHOD 1 if you already have the panel box open and have a spare horn speaker on hand.
- Use METHOD 2 if the box is closed and you need to quickly listen in to the dialler. Keep in mind that the dialler tones will be heard via any horn speaker/s connected to the siren output.

### LISTEN-IN TO DIALLER

This is a diagnostic feature to allow the installer to hear the dialler message and other telephone tones through a horn speaker.

There are 2 methods of listening to the dialler.

**METHOD 1:** Temporarily connect a horn speaker to the LISTEN pins on the main board. This method requires no programming options to be set - the LISTEN pins are always active.

**METHOD 2:** This method requires option P89E 3E to be turned on. Listen-in is enabled for a minimum of 4 minutes after exiting program mode.

During method 2 listen-in, the dialler message and other telephone tones can be heard through the siren output (at low volume) while the dialler is sending reports. The 4 minute period is restarted whenever any key on the keypad is pressed.

To turn listen-in off, go back into installer program mode and toggle the option OFF.

**PROGRAMMING SEQUENCE:**

**P89E 3E** *toggles the option ON and OFF*

OFF: Method 2 listen-in disabled
ON: Method 2 listen-in enabled

## P89E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON: Swinger shutdown enabled.

**NOTES**
- This prevents unnecessary multiple alarms reported to the central station in cases, for example, where a door is 'swinging' in the wind.

### SWINGER SHUTDOWN

Limits the number of calls made by a zone alarm when multiple zone alarms are enabled for that zone.

If enabled, multiple reports are limited to three per zone.

**PROGRAMMING SEQUENCE:**

**P89E 4E** *toggles the option ON and OFF*

OFF: No swinger shutdown (unlimited multiple reports)
ON: Swinger shutdown enabled (maximum 3 reports per zone)

## P89E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No Line Fault monitor.

**RELATED OPTIONS**
P89E 6E Line Fault to AUX2.

### LINE FAULT MONITOR

When this option is enabled, the telephone line is regularly tested. If the telephone line is not found, the line light will commence flashing.

**PROGRAMMING SEQUENCE:**

**P89E 5E** *toggles the option ON and OFF*

OFF: No line fault monitor
ON: Line fault monitor enabled

## P89E 7E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Clock uses mains frequency timing.

### INTERNAL TIMING

When set ON, the test report timer uses the panel's onboard crystal oscillator instead of the external mains power supply frequency.

Use this option if the mains frequency is not stable over long periods (not necessary in Australia and New Zealand).

**PROGRAMMING SEQUENCE:**

**P89E 7E** *toggles the option ON and OFF*

OFF: Clock uses mains frequency timing
ON: Clock uses internal timing

| Option No. | Description | 1E remote access | 2E Enable First Call mode | 3E remote arming | 4E remote disarming | 5E remote AUX control | 6E remote status reporting | 7E remote event reporting | 8E Callback mode |
|---|---|---|---|---|---|---|---|---|---|
| P90E | UPLOAD/DOWNLOAD OPTIONS | | | | | | | | |

## P90E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No remote access.

**RELATED OPTIONS**
P91E Required rings.

### REMOTE ACCESS

When selected ON, this option allows the panel to be remotely up/downloaded by a remote computer or controlled by a remote telephone.

When the option is OFF, the panel will not answer incoming telephone calls, preventing any type of remote access.

**PROGRAMMING SEQUENCE:**

**P90E 1E** *toggles the option ON and OFF*

OFF: No remote access
ON: Remote access enabled

## P90E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: Second call mode enabled.

**NOTES**
- If Callback is enabled (P90E 8E is on), then first call mode is disabled.

**RELATED OPTIONS**
P91E Required rings.

### ENABLE "FIRST CALL" MODE

For remote access the panel can answer incoming telephone calls on either the first or second call.

**First Call mode**: The panel answers a telephone call after the number of rings set by P91E. Used if the panel has the telephone line exclusively or distinctive telephone ring signal is being used.

**Second Call mode**: The panel answers on the second telephone call. The first telephone call must ring for at least the number of rings set by P91E. The second call to the panel must be made after a wait of between 10 and 50 seconds. Second Call mode is used to stop other equipment such as fax machines from answering the call.

**PROGRAMMING SEQUENCE:**

**P90E 2E** *toggles the option ON and OFF*

OFF: Second call mode enabled
ON: First call mode enabled

## P90E 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No remote arming.

**NOTES**
- remote access must also be enabled.

**RELATED OPTIONS**
P90E 1E Enable upload/download.
See page 70 for details on remote operation by telephone.

### REMOTE ARMING

Allows the remote arming of the control panel using a standard DTMF telephone (or mobile phone) from anywhere in the world.

**PROGRAMMING SEQUENCE:**

**P90E 3E** *toggles the option ON and OFF*

OFF: No remote arming
ON: Remote arming enabled

## P90E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No remote disarming.

### REMOTE DISARMING

Allows the remote disarming of the control panel using a standard DTMF telephone (or mobile phone) from anywhere in the world.

**PROGRAMMING SEQUENCE:**

**P90E 4E** *toggles the option ON and OFF*

OFF: No remote disarming
ON: remote disarming enabled

## P90E 5E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No remote AUX control.

### REMOTE AUX CONTROL

Enables the remote turn ON/OFF of the AUX1, 2, 3 and 4 outputs using a standard DTMF telephone (or mobile phone) from anywhere in the world.

**PROGRAMMING SEQUENCE:**

**P90E 5E** *toggles the option ON and OFF*

OFF: No remote AUX control
ON: remote AUX control enabled

## P90E 6E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No remote status reporting.

### REMOTE STATUS REPORTING

Enables remote status reporting.

**PROGRAMMING SEQUENCE:**

**P90E 6E** *toggles the option ON and OFF*

OFF: No remote status reporting
ON: Remote status reporting enabled

## P90E 7E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No remote event reporting.

### REMOTE EVENT REPORTING

Enables remote Event Reporting.

**PROGRAMMING SEQUENCE:**

**P90E 7E** *toggles the option ON and OFF*

OFF: No remote status reporting
ON: Remote status reporting enabled

## P90E 8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No callback.

**RELATED OPTIONS**
P90E 1E Enable up/download.
P81E Telephone number 4, callback.

### CALLBACK MODE

Enables two methods of connecting by computer for remote upload/download.

**NO CALLBACK** – Allows remote access by computer as long as the panel's account number (P72E) is known. The panel answers on the 2nd incoming call.

**WITH CALLBACK** – The panel will answer the 2nd call, verify the caller, hang up and then make the callback using telephone number 4.

**PROGRAMMING SEQUENCE:**

**P90E 8E** *toggles the option ON and OFF*

OFF: No callback
ON: Callback mode enabled

| Option No. | Description | Default | Note |
|---|---|---|---|
| P91E | REQUIRED RINGS TO ANSWER | 1 | 1 to 24 rings |

## P91E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
1

**NOTES**
- The Australian 'double ring' tone is counted as one ring.

**RELATED OPTIONS**
P90E 1E to 8E (remote access options).

### REQUIRED RINGS

Sets the number of rings before an incoming call is answered. This is used for remote access of the panel either by Clipsal software or user operation by telephone.

remote access can work in first call or second call modes, see option P90E 2E.

Programmable from 1 to 24 rings. Enter a value between 1 and 24.

**PROGRAMMING SEQUENCE:**

**P91E** *existing required rings value is displayed one digit at a time*

[ENTER NEW VALUE] E new required rings value is displayed one digit at a time

| | | ZONES 1–8 (5400) | | | | | | | | ZONES 9–16 (5400/16CB) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Option No. | Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| P94E | "NO MEMORY WARNING"ZONES | | | | | | | | | | | | | | | | |

## P94E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
No zones selected.

**NOTES**
- **0E** will turn all selections OFF.

**MEMORY E** will turn all selections ON.

### NO MEMORY WARNING ZONES

Select zones that do not flash the memory indicator on the keypad/s. The alarm still goes into memory and can be seen when reviewing.

**PROGRAMMING SEQUENCE:**

**P94E 1E-16E** *toggles the option ON and OFF*

[zone No]E OFF: Memory warning operates normally for that zone
[zone No]E ON: Memory warning is disabled for that zone

### SPECIAL FUNCTIONS

SEND DIALLER TEST REPORT

Send a dialler test report to the telephone numer programmed at P70E.
This test operates only in user program mode.

**P66666666E** *(eight 6s) Triggers dialler and sends test report to central station*

SIREN TEST

Turn the siren, reset and strobe outputs on. Pressing P E will stop the siren test (and also exits program mode).
This test operates in user and installer program mode.

**P77777777E** *(eight 7s) Triggers siren, reset, strobe*

PANEL RESET

This function resets the microprocessor. The effect is the same as powering down and powering up again. Panel reset operates in user and installer program mode.

**P88888888E** *(eight 8s) Panel Reset*

PANEL SOFTWARE VERSION

This function displays the panel software version when in program mode. Displayed in decimal format by the zone LEDs.
Example, version 5.0 is displayed by flashing 5 followed by 0.
This test operates in user and installer program mode.

**P999999999E** *(eight 9s) Displays software version*

These options allow selective restoring of various factory defaults. For example, you can default (clear) all the user codes, without affecting any other programmed options.

| Option No. | Description |
|---|---|
| P95E | CLEAR RADIO DEVICES |
| P96E | CLEAR MEMORY |
| P97E | CLEAR PANEL OPTIONS (RESTORE FACTORY DEFAULTS) |
| P98E | CLEAR USER CODES |
| P99E | PROGRAM INSTALLER CODE |

## P95E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
[not applicable]

### CLEAR RADIO DEVICES

This option clears all radio devices assigned to zones 1–8.

(This option does not clear user codes).

**PROGRAMMING SEQUENCE:**

**P95E** *Clears radio device codes*

## P96E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
[not applicable]

### CLEAR MEMORY

Enter P96E when in installer program mode to clear all events in the alarm memory display.

**PROGRAMMING SEQUENCE:**

**P96E** *Clears alarm memory display*

## P97E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
[not applicable]

**NOTES**

### CLEAR PANEL OPTIONS

This option restores 'panel' program options to their factory default values.

Defaults the options P00E, P26E–P94E, P99E, P117E–P125E, P130E–P135E, P281E–P287E, P301E, P303E, P304E, P305E, P311–P319E, P321E–P329E, P331–P339E.
This includes all options except user codes, radio codes and radio devices.

**PROGRAMMING SEQUENCE:**

**P97E** *Restores factory defaults*

## P98E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
user code 1: 123
All other codes: [blank]

**NOTES**

- This option DOES NOT clear the installer code.

### CLEAR USER CODES

This option clears all user codes, (this means all keypad codes, radio keys and access cards) and restores user code 1 to the factory setting of 123.

P201E – P256E are defaulted (user codes 1–56).

**PROGRAMMING SEQUENCE:**

**P98E** *Clears user codes*

## P99E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
000000

### PROGRAM THE INSTALLER CODE

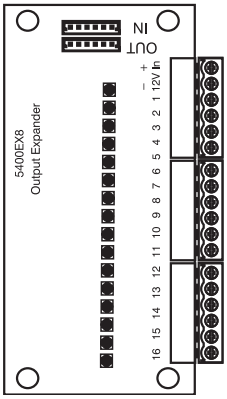
Programs the installer code. This code can be 3 to 6 digits long. Factory default installer code is 000000.

**PROGRAMMING SEQUENCE:**

**P99E [Enter new** *code]***E** *[Enter new code again]***E**

Unlike user codes, the installer code is not displayed when programming

For a complete list of factory default values, see the programming options summary on page 68.




| Option No. | Description | Enable output expander 1E | Alternate Format 2E | day zone follower 3E | Output exclude 4E | 5E | 6E | 7E | 8E |
|---|---|---|---|---|---|---|---|---|---|
| P117E | OUTPUT EXPANDER OPTIONS | | | | | | | | |

## P117E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No output expander.

**NOTES**
- Up to 2 output expander boards can be used per 5400 panel or 5400/16CB.

## ENABLE OUTPUT EXPANDER 5400EX8

Selecting this option enables the optional 106-011 output expander.

When this option is enabled, the J5 connector on the main board will only drive the output expander. All AUX outputs are available on the output expander.

See the table below for a description of each output.

**PROGRAMMING SEQUENCE:**

**P117E 1E** *toggles the option ON and OFF*

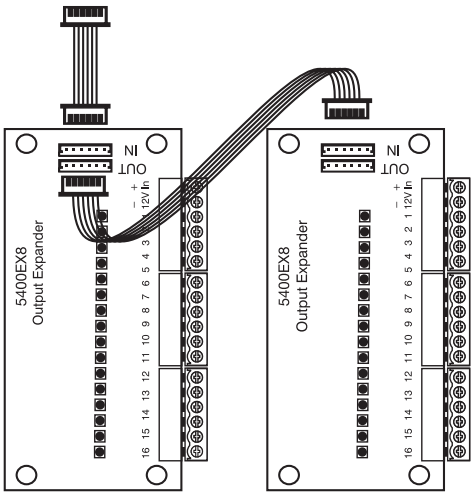
OFF: No output expander
ON: Output expander enabled

## P117E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No alternate format.

**NOTES**
- The 2nd expander plugs into the 6-way header on the 1st expander. This 6-way header on the expander cannot be used for any other purpose.
- If all 16 zones (5400/16CB) and the AUX outputs are required then 2 expanders are needed - in which case select this option so that it best suits the installation wiring.




## ALTERNATE EXPANDER FORMAT

Selecting this option changes the alarms on the 1st and 2nd output expander.

**With the option OFF:** Zone 1 to 16 are on the 1st expander. The AUX, ARM and other outputs are on the 2nd expander. Use this option when only zone outputs are required and only one expander is used.

**With the option ON:** Zones 1 to 8 are on the 1st expander. The AUX, ARM and other outputs are on the 1st expander. Zones 9 to zone 16 are on the 2nd expander. Use this option when a variety of outputs are needed using only one expander.

**PROGRAMMING SEQUENCE:**

**P117E 2E** *toggles the option ON and OFF*

OFF: **No alternate** *format*

ON: **Alternate format** *enabled*

| **Alternate format disabled** P117E 2E = OFF | | |
|---|---|---|
| **OUTPUT** | **EXPANDER 1** (Or if only using one expander) | **EXPANDER 2** |
| 1 | zone 1 | user code 9 |
| 2 | zone 2 | user code 10 |
| 3 | zone 3 | user code 11 |
| 4 | zone 4 | user code 12 |
| 5 | zone 5 | user code 13 |
| 6 | zone 6 | user code 14 |
| 7 | zone 7 | user code 15 |
| 8 | zone 8 | Tel. Line Fail |
| 9 | zone 9 | arm area 1 |
| 10 | zone 10 | arm area 2 |
| 11 | zone 11 | AUX 1 |
| 12 | zone 12 | AUX 2 |
| 13 | zone 13 | arm monitor |
| 14 | zone 14 | Mains Fail |
| 15 | zone 15 | Battery Fail |
| 16 | zone 16 | Ext. Tamper |

| **Alternate format enabled** P117E 2E = ON | | |
|---|---|---|
| **OUTPUT** | **EXPANDER 1** (Or if only using one expander) | **EXPANDER 2** |
| 1 | zone 1 | user code 9 |
| 2 | zone 2 | user code 10 |
| 3 | zone 3 | user code 11 |
| 4 | zone 4 | user code 12 |
| 5 | zone 5 | user code 13 |
| 6 | zone 6 | user code 14 |
| 7 | zone 7 | user code 15 |
| 8 | zone 8 | Tel. Line Fail |
| 9 | arm area 1 | zone 9 |
| 10 | arm area 2 | zone 10 |
| 11 | AUX 1 | zone 11 |
| 12 | AUX 2 | zone 12 |
| 13 | arm monitor | zone 13 |
| 14 | Mains Fail | zone 14 |
| 15 | Battery Fail | zone 15 |
| 16 | Ext. Tamper | zone 16 |

## P117E 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No day zone follower.

**NOTES**

### DAY ZONE FOLLOWER

This option allows day zones to appear on the zone outputs.

In day mode the zone output will follow the state of any active day zone. This occurs independently of the Program zone selections P118E (output expander zone Follower) and P119E (output expander zone Latch).

**PROGRAMMING SEQUENCE:**

**P117E 3E** *toggles the option ON and OFF*

OFF: No day zone follower
ON: day zone follower enabled

## P117E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No Output exclude.

### OUTPUT EXCLUDE

This allows zones selected for manual exclusion (not auto exclusion) to also exclude the expander zone outputs. With this option ON, and if a zone has been manually excluded then it will not signal an alarm on the expander.

**PROGRAMMING SEQUENCE:**

**P117E 4E** *toggles the option ON and OFF*

OFF: No output exclude
ON: Output exclude enabled

| | | ZONES 1–8 (5400) | | | | | | | | ZONES 9–16 (5400/16CB) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Option No. | Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| P118E | OUTPUT EXPANDER ZONES | | | | | | | | | | | | | | | | |
| P119E | OUTPUT EXPANDER ALARM ZONES | | | | | | | | | | | | | | | | |

## P118E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No output expander zones.

**NOTES**

- Selecting a zone in both P118 & P119 options effectively gives pulsed outputs whenever that zone alarms.

### OUTPUT EXPANDER ZONES

This selects the zones that will be output whenever the zone is unsealed. When the zone reseals the output automatically goes off.

Additionally if a zone is also selected in P119 (to zone latch) then an output will only occur whenever a zone is in alarm and is also unsealed. In this case when the zone reseals the output automatically goes off again. A further zone unseal will turn the zone expander output On again.

**PROGRAMMING SEQUENCE:**

**P118E 1E-16E** *toggles the options ON and OFF*

[zone No]E OFF: Output expander disabled for that zone
[zone No]E ON: Output expander enabled for that zone

## P119E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF: No output expander zone latch.

### OUTPUT EXPANDER ALARM ZONES

This selects the zones that will be output whenever the zone is latched into alarm. The output goes off only when the alarm system is reset.

Additionally if a zone is also selected in P118 (to zone follow) then an output will only occur whenever a zone is in alarm and is also unsealed. (See P118 above).

**PROGRAMMING SEQUENCE:**

**P119E 1E-16E** *toggles the option ON and OFF*

[zone No]E OFF: Output expander zone alarm disabled for that zone
[zone No]E ON: Output expander zone alarm enabled for that zone

| Option No. | Description | Latched keyswitch input 1E | monitor arm chirps 2E | radio key AUX arms monitor 3E | keyswitch ARM only 4E | keyswitch DISARM only 5E | Smart Beep 6E | 7E | 8E |
|---|---|---|---|---|---|---|---|---|---|
| P120E | OTHER OPTIONS | | | | | | | | |

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**PROGRAMMING SEQUENCE:**

**P120E [1E–6E]** *Turns options on or off.*

NOTE: Enabling this option disables all other methods for arming and disarming (keypad, radio key, card).

## P120E 1E

**RELATED OPTIONS**
P60E 2E, 3E keyswitch options.

### LATCHED KEYSWITCH

This option enables the use of a latched, (2 position on/off), keyswitch. Keyswitch operation must first be enabled using options P60E 2E, 3E, page 22.

OFF: No Latched keyswitch (Factory default).
ON: Latched keyswitch enabled.

## P120E 2E

**NOTE**
- This option enables radio key monitor arming chirps regardless of the state of P64E 4E (radio key siren chirps).

### MONITOR ARM CHIRPS BY RADIO KEY

This option enables siren chirps when arming monitor mode with a radio key. Note: this enables siren chirps on monitor arming, not disarming.

OFF: No monitor arm chirps, (factory default).
ON: monitor arm chirps enabled.

## P120E 3E

**NOTE**
- This option enables radio key monitor arming chirps regardless of the state of P64E 4E (radio key siren chirps).

### RADIO AUX BUTTON ARMS MONITOR MODE

This option enables the AUX button on a radio key to arm monitor mode.

(The On button on either the 3 or 4 radio keys can also be used to arm monitor mode). When this option is enabled, options P122E 3E and 4E will be disabled, (AUX button to AUX2 options, see page 56).

OFF: No AUX button monitor arm, (factory default).
ON: AUX button monitor arm enabled.

## P120E 4E

**RELATED OPTIONS**
P120E 1E Latched keyswitch
P60E 2E, 3E Keyswitch options.

### KEYSWITCH DISARM ONLY

Converts the use of keyswitch operation using P60E 2E and 3E to only DISARM either from area or monitor mode. Keyswitch operation must first be enabled using options P60E 2E, 3E, page 22.

OFF: keyswitch arms and disarms, (factory default).
ON: keyswitch disarms only.

## P120E 5E

**RELATED OPTIONS**
P120E 1E Latched keyswitch.
P60E 2E, 3E Keyswitch options.

### KEYSWITCH ARM ONLY

Converts the use of keyswitch operation using P60E 2E and 3E to only ARM either from area or monitor mode.

keyswitch operation must first be enabled using options P60E 2E, 3E, page 22.

OFF: Keyswitch arms and disarms, (factory default).
ON: Keyswitch arms only.

## P120E 6E

**NOTES**
- The zone causing the event is saved and can be identified by viewing MEMORY. Only one of the same consecutive zone warnings is saved, although the MEMORY display will flash each time (unless disabled by P94E option).
- smart beeps work in addition to any other outputs mapped to monitor and day alarms, as programmed by options P63E 1E–8E.
- smart beeps work in conjunction with any other monitor and day mode outputs, (as set by options P63E 1E–8E).

### SMART BEEPS

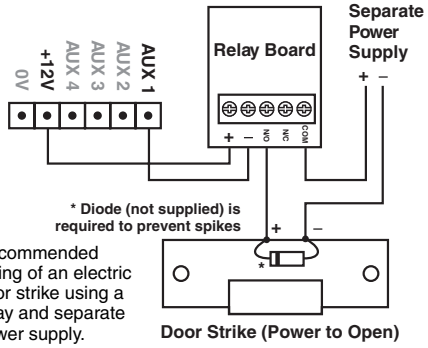
Smart beeps are available in brief monitor or brief day mode to identify zones by keypad beeps.

When a monitor zone or day zone is triggered, the zone number is slowly beeped out, followed by 2 seconds of silence. This is repeated 3 times and can be stopped by another beep (such as keypress).

If the zone has entry delay you will hear the smart beeps sequence once when the zone is triggered and again at the end of entry delay. If entry beeps are disabled (P60E 1E), smart beeps will only be heard at the end of entry delay.

smart beeps use the keypad/s onboard sonalert, so option P63E 3E and/or 7E must be on to enable the sonalert output for monitor alarms and day alarms.

OFF: Smart beeps disabled, (factory default).
ON: Smart beeps enabled.




Recommended wiring of an electric door strike using a relay and separate power supply.

AUX1 OUTPUT OPTIONS
Sets the behaviour of the AUX1 output.
Only one option can be selected.

| Option No. | Description | 1E zone alarms to AUX1 | 2E zone supervision alarms to AUX1 | 3E radio key Panic TOGGLES AUX1 | 4E radio key Panic PULSES AUX1 | 5E | 6E Enable phone control of AUX1 | 7E DOTL alerts to AUX1 | 8E reader output pulses AUX1 |
|---|---|---|---|---|---|---|---|---|---|
| P121E | AUX1 OUTPUT OPTIONS | ON | | | | | | | |

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**PROGRAMMING SEQUENCE:**

**P121E [1E–8E]** *Turns an option on. Only one option can be on.*

## P121E 1E

**RELATED OPTIONS**
P58E AUX1 zones.

### ZONE ALARMS TO AUX1

With this option ON, zones selected in P58E will turn on AUX1 when they go into alarm. The AUX1 output turns off when the panel is disarmed/reset.

1E OFF: Zone alarms do not turn on AUX1.
1E ON: zone alarms turn on AUX1, (factory default).

## P121E 2E

**RELATED OPTIONS**
P65E, P66E, P67E radio supervision.

### ZONE SUPERVISION ALARMS TO AUX1

Setting this option turns the AUX1 output ON when a SUPERVISED RADIO alarm is triggered. The AUX1 output turns off when the panel is disarmed/reset.

2E OFF: Zone supervision alarms do not turn on AUX1, (factory default).
2E ON: zone supervision alarms turn on AUX1

## P121E 3E

**NOTES**
- When this option is enabled, the radio key/s panic button will no longer sound alarms or report to the dialler.

### RADIO KEY PANIC TOGGLE

When this option is on, radio key/s Panic button will TOGGLE the AUX1 output. The AUX1 output will operate independently of the panel's armed status, ie. Disarming does not turn AUX1 off.

3E OFF: Radio key Panic does not Toggle AUX1, (factory default).
3E ON: Radio key Panic Toggles AUX1.

## P121E 4E

**NOTES**
- When this option is enabled, the radio key/s Panic button will no longer sound alarms or report to the dialler.

### RADIO KEY PANIC PULSE

When this option is on, radio key/s Panic button will PULSE the AUX1 output, (on for 2 sec).

4E OFF: Radio key Panic does not Pulse AUX1, (factory default).
4E ON: Radio key Panic Pulses AUX1.

## P121E 6E

**RELATED OPTIONS**
P90E 5E, Enable remote AUX control.

### ENABLE TELEPHONE REMOTE CONTROL OF AUX1

Enables AUX1 output to be controlled by telephone remote control. P90E 5E must also be enabled. After establishing telephone control of the panel, use telephone key "3" to toggle the output on and off.

6E OFF: AUX1 cannot be controlled by telephone, (factory default).
6E ON: AUX1 can be controlled by telephone.

## P121E 7E

**RELATED OPTIONS**
P303E DOTL zones.
P304E DOTL timer.

### DOOR OPEN TOO LONG (DOTL) ALERTS TO AUX1

This option enables DOTL zones (P303E) to turn on AUX1 when the DOTL time (P304E) expires.

7E OFF: DOTL alert does not turn on AUX1, (factory default).
7E ON: DOTL alert turns on AUX1.

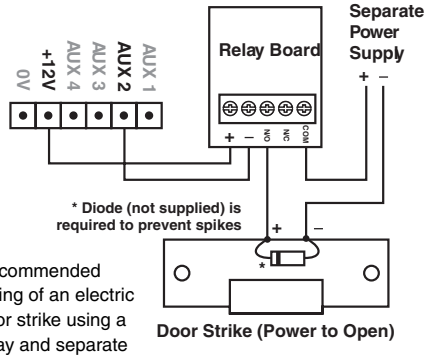
## P121E 8E

**RELATED OPTIONS**
P318E, P328E, P338E, P319E, P329E, P339E.

### READER OUTPUT TO AUX1

This option enables an access control reader to pulse AUX1 when a valid access card is presented. Set the reader using P318E, P328E or P338E

8E OFF: No reader output to AUX1, (factory default).
8E ON: Reader output to AUX1.




Recommended wiring of an electric door strike using a relay and separate power supply.

AUX2 OUTPUT OPTIONS
Sets the behaviour of the AUX2 output.
Only one option can be selected.

| Option No. | Description | zone alarms to AUX2 1E | zone supervision alarms to AUX2 2E | radio key AUX button TOGGLES AUX2 3E | radio key AUX button PULSES AUX2 4E | Phone line fail to AUX2 5E | Enable phone control of AUX2 6E | DOTL alerts to AUX2 7E | reader output pulses AUX2 8E |
|---|---|---|---|---|---|---|---|---|---|
| P122E | AUX2 OUTPUT OPTIONS | ON | | | | | | | |

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**PROGRAMMING SEQUENCE:**

**P122E [1E–8E]** *Turns an option on. Only one option can be on.*

## P122E 1E

**RELATED OPTIONS**
P59E AUX2 zones.

### ZONE ALARMS TO AUX2

With this option ON, zones selected in P59E will turn on AUX2 when they go into alarm. The AUX2 output turns off when the panel is disarmed/reset.

1E OFF: Zone alarms do not turn on AUX2.
1E ON: zone alarms turn on AUX2, (factory default).

## P122E 2E

**RELATED OPTIONS**
P65E, P66E, P67E radio supervision.

### ZONE SUPERVISION ALARMS TO AUX2

Setting this option turns the AUX2 output ON when a SUPERVISED RADIO alarm is triggered. The AUX2 output turns off when the panel is disarmed/reset.

2E OFF: Zone supervision alarms do not turn on AUX2, (factory default).
2E ON: zone supervision alarms turn on AUX2.

## P122E 3E

**NOTES**
- When this option is enabled, the radio key/s Panic button will no longer sound alarms or report to the dialler.

### RADIO KEY AUX BUTTON TOGGLE

When this option is on, radio key/s AUX button will TOGGLE the AUX2 output. The AUX2 output will operate independently of the panel's armed status, ie. Disarming does not turn AUX2 off.

3E OFF: Zone supervision alarms do not turn on AUX2, (factory default).
3E ON: zone supervision alarms turn on AUX2.

## P122E 4E

**NOTES**
- When this option is enabled, the radio key/s Panic button will no longer sound alarms or report to the dialler.

### RADIO KEY AUX BUTTON PULSE

When this option is on, radio key/s AUX button button will PULSE, (on for 2 sec), the AUX2 output.

4E OFF: Radio key AUX button does not Pulse AUX2, (factory default).
4E ON: Radio key AUX button Pulses AUX2.

## P122E 5E

### TELEPHONE LINE FAULT TO AUX2

When this option is enabled, a telephone line fault condition will turn on the AUX2 output. AUX 2 will turn off when the telephone line is restored.

5E OFF: No telephone line fault to AUX2, (factory default).
5E ON: Telephone line fault to AUX2.

## P122E 6E

**RELATED OPTIONS**
P90E 5E, Enable remote AUX control.

### ENABLE TELEPHONE REMOTE CONTROL OF AUX2

Enables AUX2 output to be controlled by telephone remote control. P90E 5E must also be enabled. After establishing telephone control of the panel, use telephone key "4" to toggle the output on and off.

6E OFF: AUX2 cannot be controlled by telephone, (factory default).
6E ON: AUX2 can be controlled by telephone.

## P122E 7E

**RELATED OPTIONS**
P303E DOTL zones.
P304E DOTL timer.

### DOOR OPEN TOO LONG (DOTL) ALERTS TO AUX2

This option enables DOTL zones (P303E) to turn on AUX2 when the DOTL Time (P304E) expires.

7E OFF: DOTL alert does not turn on AUX2, (factory default).
7E ON: DOTL alert turns on AUX2.

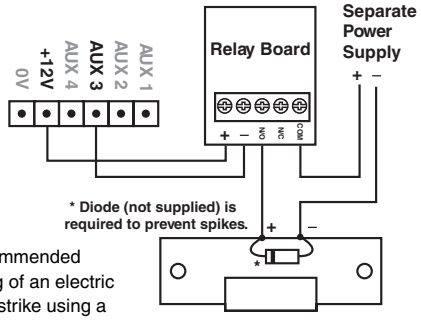
## P122E 8E

**RELATED OPTIONS**
P318E, P328E, P338E, P319E, P329E, P339E

### READER OUTPUT TO AUX2

This option enables an access control reader to pulse AUX2 when a valid access card is presented. Set the reader using P318E, P328E or P338E

8E OFF: No reader output to AUX2, (factory default).
8E ON: Reader output to AUX2.




Recommended wiring of an electric door strike using a relay and separate power supply.

**PROGRAM MODE LEVEL**
Installer, remote by PC.

## P123E 1E

**NOTES**

- This option makes AUX3 act like the arm1 output on previous versions of 5400.

## P123E 6E

**RELATED OPTIONS**
P90E 5E, Enable remote AUX control.

## P123E 8E

**RELATED OPTIONS**
P318E, P328E, P338E, P319E, P329E, P339E.

**PROGRAM MODE LEVEL**
installer, remote by PC.

## P124E 1E

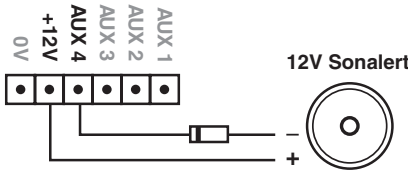
**NOTES**

- This option makes AUX4 act like the arm2 output on previous versions of 5400.

## P124E 2E

**NOTES**

- The extension beeper can either be a standard 12V sonalert or wire directly to the Quantum Sonic as shown. Keypad beeps will be heard at low volume from the Quantum Sonic's onboard siren. (Normal siren sound is unaffected).




AUX3 OUTPUT OPTIONS
Sets the behaviour of the AUX3 output.
Only one option can be selected.

| Option No. | Description | 1E Area1 arm output to AUX3 | 2E | 3E | 4E | 5E | 6E Enable phone control of AUX3 | 7E | 8E reader output pulses AUX3 |
|---|---|---|---|---|---|---|---|---|---|
| P123E | AUX3 OUTPUT OPTIONS | ON | | | | | | | |

**PROGRAMMING SEQUENCE:**

**P123E [1E–8E]** *Turns an option on. Only one option can be on*

### AREA1 ARMED OUTPUT TO AUX3

When this option is enabled, AUX3 will turn on and off when area1 is armed and disarmed.

1E OFF: Area1 armed output does not turn on AUX3.
1E ON: Area1 armed output turns on AUX3, (factory default).

### ENABLE TELEPHONE REMOTE CONTROL OF AUX3

Enables AUX3 output to be controlled by telephone remote control. P90E 5E must also be enabled. After establishing telephone control of the panel, use telephone key "5" to toggle the output on and off.

6E OFF: AUX3 cannot be controlled by telephone, (factory default).
6E ON: AUX3 can be controlled by telephone.

### READER OUTPUT TO AUX3

This option enables an access control reader to pulse AUX3 when a valid access card is presented. Set the reader using P318E, P328E or P338E

8E OFF: No reader output to AUX3, (factory default).
8E ON: Reader output to AUX3.

AUX4 OUTPUT OPTIONS
Sets the behaviour of the AUX4 output.
Only one option can be selected.

| Option No. | Description | 1E area2 arm output to AUX4 | 2E Extension sonalert | 3E | 4E | 5E | 6E Enable phone control of AUX4 | 7E | 8E reader output pulses AUX4 |
|---|---|---|---|---|---|---|---|---|---|
| P124E | AUX4 OUTPUT OPTIONS | ON | | | | | | | |

### AREA2 ARMED OUTPUT TO AUX4

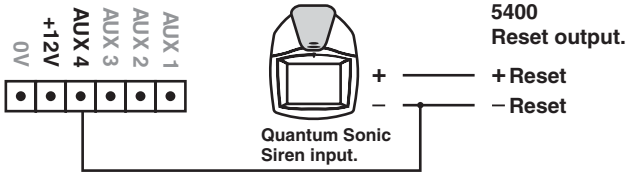
When this option is enabled, AUX4 will turn on and off when area2 is armed and disarmed.

1E OFF: Area2 armed output does not turn on AUX4.
1E ON: Area2 armed output turns on AUX4, (factory default).

### ENABLE EXTENSION SONALERT

Enables the AUX4 output to duplicate all keypad beeps including keypress beeps. This is useful in cases where, for example, entry beeps or other keypad beeps need to be heard in more than one location on the premises (Adding an additional keypad would achieve the same effect)

2E OFF: Extension sonalert disabled, (factory default).
2E ON: Extension sonalert enabled.



## P124E 6E

**RELATED OPTIONS**
P90E 5E, Enable remote AUX control.

### ENABLE TELEPHONE REMOTE CONTROL OF AUX4

Enables AUX4 output to be controlled by telephone remote control. P90E 5E must also be enabled. After establishing telephone control of the panel, use telephone key "6" to toggle the output on and off.

6E OFF: AUX4 cannot be controlled by telephone, (factory default).
6E ON: AUX4 can be controlled by telephone.

## P124E 8E

**RELATED OPTIONS**
P318E, P328E, P338E, P319E, P329E, P339E.

### READER OUTPUT TO AUX4

This option enables an access control reader to pulse AUX4 when a valid access card is presented. Set the reader using P318E, P328E or P338E

8E OFF: No reader output to AUX4, (factory default).
8E ON: Reader output to AUX4.

| | | ZONES 1–8 (5400) | | | | | | | | ZONES 9–16 (5400/16CB) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Option No. | Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| P125E | ENABLE HARDWIRED ZONES | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | | | | | | ON |

## P125E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All on.

**NOTES**
- THIS OPTION APPLIES ONLY TO WIRED ZONES AND HAS NO EFFECT ON RADIO ZONES.

### ENABLE HARDWIRED ZONES

This option allows hardwired zone inputs to be enabled or disabled.

Disabled zones are ignored and do not need to be terminated with end of line resistors.

This option has no effect on radio zones.

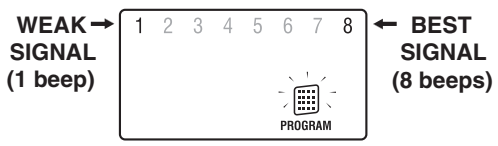
PROGRAMMING SEQUENCE:

**P125E 1E-16E** *toggles the options ON and OFF*

[zone No]E OFF: Output expander disabled for that zone
[zone No]E ON: Output expander enabled for that zone

# CLIPSAL RADIO

**NOTES**
- Signal strength of radio keys can be tested in USER PROGRAM mode or INSTALLER PROGRAM mode.
- Signal strength of all other radio devices is tested in INSTALLER PROGRAM mode.
- PRESS **3E** to test the signal strength of the selected transmitter ONLY. (Other devices will be ignored).
- PRESS **4E** to test the signal strength of ANY CLIPSAL transmitter (including unprogrammed devices).




### SIGNAL STRENGTH TEST

The signal strength test can be used to test the radio signal from any Clipsal radio device. The strength of the radio signal received is displayed on the zone lights 1- 8 and beeped by the keypad.

The higher the number displayed (and beeped) the stronger the signal received.

**TEST SEQUENCE:**

❶ Enter the option for the radio device to be tested
For radio keys: options P201E–P256E. For radio devices, options P101E–P116E.

❷ Press 3E.

❸ Trigger the radio device:

- One of zone lights 1 to 8 will turn ON to indicate the signal strength from the transmitter.
- The signal strength display remains on until another command is entered.
- To clear the display and re-test the transmitter, simply press 3E again (or 4E to test any other transmitter).

## RADIO DEVICES

### OPERATION

**ALARM:** Any radio device can operate on any zone. Hardwired zones continue to operate in parallel.

radio keys can also operate on radio zones for special purposes, but they should normally be used as radio codes.

**KEYSWITCH INPUT:** A radio device programmed to zone 8 will still work as an alarm even if the zone 8 input operation has been changed to keyswitch operation. The P60E 2E and 3E options only affect the zone 8 terminal inputs.

**VIBRATION:** Radio device zone signals IGNORE the P30E–P38E vibration sensor settings.

**TAMPER REPORT:** Radio device tamper operation depends on the armed State of the control panel.

**RADIO TAMPER:** Causes the keypad to continuously beep and also to flash the RADIO, TAMPER and the ZONE (identifying the detector) lights. Pressing any key on the keypad or sending a TAMPER RESTORE will clear this warning.

**LOW BATTERY REPORT:** A low battery gives 10 beeps and flashes the RADIO and the BATTERY light. The ZONE light identifying the radio device is also ON. The flashing lights stop when any key on the keypad is pressed or a detector code with no low battery is received. Low Battery generates HISTORY and DIALLER reports ONCE only (until the low battery is fixed and a restore report is received).

**SUPERVISION:** If a zone has the P65E option ON and a radio code has been programmed for that zone, then the supervision is active. This means that the radio detector does not need to have its SUPER enabled (via header link) for the SUPERVISED timeout to occur. (Useful as an inactivity alarm). A zone supervision failure always flashes the identifying ZONE light and the RADIO light.

CLIPSAL RADIO DEVICES
Radio Events Table

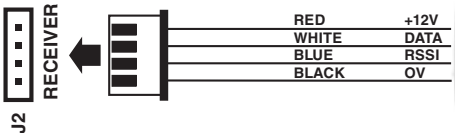
| SIGNAL TYPE | RK1 RADIO KEY PENDANT 5401BP | RK3 RADIO KEY 3 BUTTON 5403BP | RADIO 5420/90F | RADIO REED SWITCH 5460MRF |
|---|---|---|---|---|
| ARM / DISARM | | ON/OFF buttons | | |
| ALARM | | | yes | yes |
| RESTORAL | | | | yes |
| PANIC | PANIC button | PANIC button | | |
| AUX | | | | |
| LOW BATT | yes | yes | yes | yes |
| TAMPER | | | | yes |
| SUPERVISION | | | yes | yes |

### CLIPSAL RADIO INTERFACE

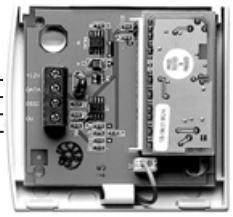
The radio interface is the optional radio receiver required to enable all radio functions. Connection to the control panel is via a 4 wire loom and plug supplied with the radio Interface.

If the radio interface is correctly installed, the keypad will flash the RADIO light ON when any radio signal is detected (from both programmed and non-programmed radio devices).

**CLIPSAL 5400 OR 5400/16CB CONTROL PANEL**




**CLIPSAL 5400RF RADIO INTERFACE**



**NOTES**

- The radio Interface is normally installed inside the control panel box.
- In cases where radio reception needs to be improved, the optional 100-200 radio Interface can be installed up to 50 metres away from the control panel. Use 14/0.20 SHIELDED cable or equivalent.

The shield can either be connected to the EARTH connection or left unconnected. Leave the shield unconnected at the receiver end.

- If the radio Interface must be installed inside a metal enclosure, the antenna wire should protrude outside the enclosure.
- For best performance, the antenna wire should be kept straight and not coiled, shortened or extended.

### RADIO SUPERVISION

The purpose of radio supervision is to verify the correct operation of radio PIRs. The supervision signal from the radio PIR tells the panel that the device has not been removed from radio range and is in working order.

Non-SUPERVISION radio PIRs can also be programmed and used with the SUPERVISION TIMERS.

A non-SUPERVISION enabled radio PIR will transmit signals to the panel only when it has detected an event. Obviously, there is no guaranteed signal period.

In either case, when the allowed time limit is exceeded then a WARNING is first given (if programmed by P66E 3E), and then after 1 minute, the programmed RADIO SUPERVISION ALERTS are generated by the panel.

NOTE: Manually excluding a supervised zone will also disable radio supervision for that zone.

## P101E – P116E

**PROGRAM MODE LEVEL**
Installer.

**FACTORY DEFAULT**
No radio devices programmed.

**NOTES**

- radio device programming is done by 'learning' the code by radio.
- radio devices codes can only be deleted by keypad.
- Some radio devices send separate alarm and restore signals.
- For special purposes, radio zones can be also programmed to accept radio keys. In this case the zone can not also be programmed to accept a radio device.
- Late model radio PIRs and radio reed switches send supervision signals.

**SUPERVISION RELATED OPTIONS**
**P65E** Supervised radio zones.
**P66E** Radio supervision alerts.
**P67E** Radio supervision time.
**P75E 12E** radio supervision fail report.

RADIO DEVICES - OPTION TABLE

| | | |
|---|---|---|
| 5400 | zone 1 | P101E |
| | zone 2 | P102E |
| | zone 3 | P103E |
| | zone 4 | P104E |
| | zone 5 | P105E |
| | zone 6 | P106E |
| | zone 7 | P107E |
| | zone 8 | P108E |
| 5400/16CB | zone 9 | P109E |
| | zone 10 | P110E |
| | zone 11 | P111E |
| | zone 12 | P112E |
| | zone 13 | P113E |
| | zone 14 | P114E |
| | zone 15 | P115E |
| | zone 16 | P116E |

**TIP:** To prevent conflicting radio signals when programming radio devices, disable each device once you have finished programming it. (Remove the battery or open the RADIO link).

Remember to enable all the devices when programming is completed.

## RADIO DEVICE PROGRAMMING

Each of the zones of the 5400 or 5400/16CB can be a radio zone. Once programmed, zones can accept both radio devices and normal zone inputs simultaneously.

The optional radio Interface is required for radio devices to operate.

A radio device is any type of Clipsal transmitter including radio PIR, radio Reed Switches.

**PROGRAMMING RADIO DEVICES**
Up to 8 or 16 radio devices can be assigned to the 5400 and 5400/16CB (one per zone).

**PROGRAMMING SEQUENCE – NO RESTORALS**
Suitable for radio PIR, radio Pendant (5401BP).

❶ **Select a zone using P101E – P116E**
The ARMED light will be ON if a radio device is already programmed to the zone. Press 0E to delete.

❷ **Press** 1E
The READY light will turn ON to indicate that the zone is ready to accept the radio device.

❸ **Trigger the radio device**
A. If the radio device is accepted, the READY light will turn off, the ARMED light will turn on and 3 beeps will sound.
B. If the READY light stays on and a warning beep sounds, the radio device is already assigned to another zone and must be cleared from that zone first.
C. If SUPERVISED SIGNALS have also been successfully recognised, the TAMPER light will turn ON.

**EXAMPLE**: To program a radio PIR on zone 1:

**P101E 1E** Trigger the radio PIR (or simply connect the battery).

**NOTE:** When using the 5401BP, the zone it is assigned to should be made a 24 hour zone for Panic or Medical Alert.

**PROGRAMMING SEQUENCE – WITH RESTORALS**
Suitable for radio Reed Switch.

❶ **alarm the reed switch**, ie. move the magnet away from the switch
Leave the reed switch in the alarm condition and wait until radio transmission has stopped.

❷ **Select a zone using P101E – P116E**
The ARMED light will be ON if a radio device is already programmed to the zone. Press 0E to delete.

❸ **Press 1E**
The READY light will turn ON to indicate that the zone is ready to accept the radio device.

❹ **Restore the reed switch** (place the magnet next to the switch)
A. If the radio device is accepted, the READY light will turn off, the ARMED light will turn on and 3 beeps will sound.
B. The MEMORY light will turn on to indicate that this device sends restorals.
C. If the READY light stays on and a warning beep sounds, the radio device is already assigned to another zone and must be cleared from that zone first.
D. If SUPERVISED SIGNALS have also been successfully recognised, the TAMPER light will turn ON.

**EXAMPLE**: To program a radio reed switch with restorals on zone 2:
alarm the reed switch P102E 1E Restore the reed switch.

**DELETING A RADIO DEVICE:**

❶ Use P101E to P116E to select the zone.
❷ Press 0E to clear the device (3 beeps will sound).

The radio PIRs have a TEST link which disables the re-transmit timer, allowing the detector to be walk tested without waiting for the 4 minute re-transmit timer to expire. If the TEST link is left on, the PIR will automatically revert to normal mode after 30 minutes.

**TEST mode can be re-started by briefly removing then replacing the battery.**

| USER CODE OPTIONS TABLE | | EXTRA OPTIONS MODE (exclude Light is on). |
|---|---|---|
| **USER CODE** | **OPTION NO.** | **5E** RADIO CODE |
| 1 (Master) | P201E | |
| 2 | P202E | |
| 3 | P203E | |
| 4 | P204E | |
| 5 | P205E | |
| 6 | P206E | |
| 7 | P207E | |
| 8 | P208E | |
| 9 | P209E | |
| 10 | P210E | |
| 11 | P211E | |
| 12 | P212E | |
| 13 | P213E | |
| 14 | P214E | |
| 15 | P215E | |
| 16 | P216E | |
| 17 | P217E | |
| 18 | P218E | |
| 19 | P219E | |
| 20 | P220E | |
| 21 | P221E | |
| 22 | P222E | |
| 23 | P223E | |
| 24 | P224E | |
| 25 | P225E | |
| 26 | P226E | |
| 27 | P227E | |
| 28 | P228E | |
| 29 | P229E | |
| 30 | P230E | |
| 31 | P231E | |
| 32 | P232E | |
| 33 | P233E | |
| 34 | P234E | |
| 35 | P235E | |
| 36 | P236E | |
| 37 | P237E | |
| 38 | P238E | |
| 39 | P239E | |
| 40 | P240E | |
| 41 | P241E | |
| 42 | P242E | |
| 43 | P243E | |
| 44 | P244E | |
| 45 | P245E | |
| 46 | P246E | |
| 47 | P247E | |
| 48 | P248E | |
| 49 | P249E | |
| 50 | P250E | |
| 51 | P251E | |
| 52 | P252E | |
| 53 | P253E | |
| 54 | P254E | |
| 55 | P255E | |
| 56 | P256E | |

radio key

radio key

radio keypad

**RADIO CODES**

Each of the 56 user codes, except for the master code, can be programmed to be radio codes. This allows up to 55 radio keys to be used for arming and disarming of the panel. The radio keypad can also be used with the 5400 and 5400/16CB. The optional radio Interface is required for radio operation.

**PROGRAMMING RADIO KEYS**

Use the Extra options programming mode to enable selected user codes as radio codes. When a user code is enabled as a radio code, its keypad code, (if any), is automatically deleted.

**PROGRAMMING SEQUENCE:**

❶ In installer Program mode, enter the option number for the user code which will be become a radio code. (P202E–P256E).

❷ Press EXCLUDE E to enter Extra options mode. (The exclude light is on).

❸ Press 5E to enable that user code as a radio code. (Light 5 is on).

❹ Press EXCLUDE E to exit Extra options mode. (The exclude light is off).

❺ Press 1E

The READY light will turn ON to indicate that the user code is ready to accept the radio key.

If a code is already programmed the READY light will not turn on and a warning beep will sound. To clear the code, press 0E, then go back to step 5. (0E clears any existing codes).

❻ Press the OFF button on the radio key to be programmed

If the radio key is accepted, the READY light will turn off and 3 beeps will sound.

If the READY light stays on and a warning beep sounds, the radio key is already assigned to another user code and must be cleared from that user code first.

**EXAMPLE: To enable user code 56 as a radio code and program a radio key.**

In installer Program mode.

Press **P256E EXCLUDE E 5E EXCLUDE E 1E** then press the OFF button on the radio key.

## P201E – P256E

**PROGRAM MODE LEVEL:** Installer.

**FACTORY DEFAULT:** No radio codes, all code are keypad codes.

**NOTES**

- user code 1 (master code) is always a keypad code.
- radio codes can be deleted by keypad in the case of a lost radio key.
- radio keys are assigned to user codes, so that open/close reports are identified by user number when the control panel is base station monitored. (If open/close reports are enabled).

**RELATED OPTIONS**

P101E–P116E Programming radio devices.

**TO DELETE A RADIO CODE:**

Any radio code can be deleted if necessary, (lost radio key or if programming a radio key over an old one). A radio code is automatically deleted when the user code type is changed to keypad code or reader code.

**EXAMPLE: To delete radio code 56.**

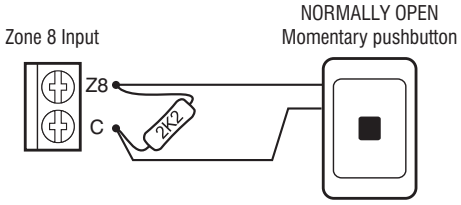
In installer Program mode: Press **P256E 0E**

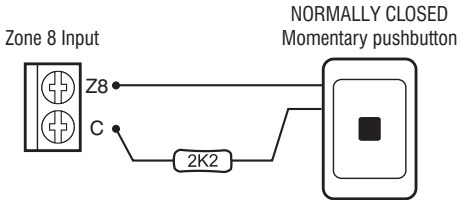
If connecting multiple readers, the option to enable multiple readers (P301E 1E) should be turned on *before* programming any access cards.

(Enabling p301e 1e erases existing card programming).

If P301E 3E is enabled, a momentary push button can be wired to zone 8 as shown.

For example, this option allows the reader output to operate a door lock during the day by presenting your card. Then at the end of the day press the push button within 5 seconds of presenting the card and the panel will arm.




**PROGRAMMING ACCESS CARDS**

If the panel has 1, 2 or 3 weigand proximity readers connected up to 55 of the panel's user codes can be programmed as reader codes. this allows arming/ disarming by access card and operation of AUX outputs to open electric door strikes.

Use the extra options programming mode to enable selected user codes to readers 1, 2 or 3. When a user code is enabled as a reader code, its keypad code (if any) is automatically deleted. A user code enabled as a reader code cannot also be a keypad code or radio code.

**PROGRAMMING SEQUENCE:**

❶ **In installer Program mode, enter the option number for the user code to be programmed. (P202E–P256E).**

❷ **Press EXCLUDE E to enter Extra options mode (The exclude light is on).**

❸ **Press 5E, 6E or 7E to enable that user code to reader 1, 2 or 3 (Light 5, 6 or 7 will turn on).**

❹ **Press EXCLUDE E to exit Extra options mode (The exclude light is off).**

❺ **Press 1E**

A. The READY light will turn ON to indicate that the user code is ready to accept an access card.

B. If a code is already programmed the READY light will not turn on and a warning beep will sound. To clear the code, press 0E, then go back to step 5. (0E clears any existing codes.)

❻ **Present an access card to the reader.**

A. If the access card is accepted, the READY light will turn off and 3 beeps will sound.

B. If the READY light stays on and a warning beep sounds, the access card is already assigned to another user code and must be cleared from that user code first.

Once a card is programmed to a user code it can be used to:

ARM THE PANEL

To allow arming with a double read, enable option P301E 2E.

To allow arming with a single read and pushbutton, enable option P301E 3E.

(Both methods can be enabled at once.)

DISARM THE PANEL

To allow disarming (single read) enable option P301E 4E.

(This option can be enabled if necessary. A user may be allowed to arm by access card but not disarm, or vice-versa.)

OPERATE AUX OUTPUT/S

To allow the operation of panel AUX outputs by access card, the reader to which the card is assigned must be programmed to operate one of the four AUX outputs.

- First, enable one or more AUX outputs to be a reader output, (P121E 8E, P122E 8E, P123E 8E and P124E 8E).
- Next, assign which reader will trigger which AUX output.

## P300E

**PROGRAM MODE LEVEL**
installer.

| Option No. | Description |
|---|---|
| P300E | DEFAULT ALL ACCESS CONTROL OPTIONS |

**DEFAULT ALL ACCESS CONTROL OPTIONS**

Enter P300E in installer program mode to return all access control programs to factory default values.

| Option No. | Description | Default | Note |
|---|---|---|---|
| P130E | REAL TIME CLOCK SET **MINUTES** | 00 | 00–59 minutes |
| P131E | REAL TIME CLOCK SET **HOURS** | 00 | 00–23 hours (00=midnight) |
| P132E | REAL TIME CLOCK SET **DAY** | 01 | 01–31 days |
| P133E | REAL TIME CLOCK SET **MONTH** | 01 | 01–12 months |
| P134E | REAL TIME CLOCK SET **YEAR** | 04 | 00–63 (2000–2063) |
| P135E | REAL TIME CLOCK SET **DAY OF WEEK** | 1 | 1–7 (1=Sunday, 7=Saturday) |

## P130E – P135E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**NOTES**

- These options are dynamically updated. When the program option is entered, the keypad display will show the current value.

**PROGRAMMING SEQUENCE:**

**P130E–P135** *existing value is displayed one digit at a time*

**[ENTER NEW VALUE] E** *new value is displayed one digit at a time*

**P130E** Real time clock MINUTES. Enter a value between 00 and 59. Default 00 minutes.

**P131E** Real time clock HOURS. Enter a value between 00 and 23. Default 00 hours.

**P132E** Real time clock DAY OF THE MONTH. Enter a value between 01 and 31. Default 01 (1st day of the month).
Ensure that the setting does not exceed the days in the current month. The panel does not cross check this setting.

**P133E** Real time clock MONTH. Enter a value between 01 and 12. Default 01 (January).

**P134E** Real time clock YEAR. Enter a value between 00 and 63. (2000–2063). Default 04, (2004).

**P135E** Real time clock DAY OF THE WEEK. Enter a value between 1 and 7. (1=Sunday). Default 1 (Sunday).

| Option No. | Description | Use reader addresses 1E | arm with double read 2E | arm with single read & pushbutton 3E | disarm 4E |
|---|---|---|---|---|---|
| P301E | ACCESS CONTROL OPTIONS | | | | ON |

## P301E 1E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF (Use one reader).

**NOTES**
- When using multiple readers, this option must be enabled before programming any access cards, (to avoid losing card programming when the option is enabled).

### USE READER ADDRESSES

If ON then all readers connected to the 5400/5400/16CB must have set addresses of 1, 2 or 3. The data is then sent in an extended format that includes the reader address. (Use up to three readers).

If OFF, one standard Weigand 26bit reader can be used. The reader's actions are determined by the P318E, P319E reader 1 options.

**PROGRAMMING SEQUENCE:**

**P301E 1E** *toggles the option ON and OFF*

OFF: Do not use reader addresses ON: Use reader addresses

## P301E 2E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF.

### ARM WITH DOUBLE READ

When this option is enabled the panel will arm if a valid access card is presented to a reader twice within 5 seconds.

**PROGRAMMING SEQUENCE:**

**P301E 2E** *toggles the option ON and OFF*

OFF: Do not arm With Double Read ON: Arm with double read

## P301E 3E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF.

### ARM WITH SINGLE READ AND PUSHBUTTON

When this option is enabled the panel will arm if a valid access card is presented to a reader once and zone 8 is unsealed momentarily within 5 seconds.

**PROGRAMMING SEQUENCE:**

**P301E 3E** *toggles the option ON and OFF*

OFF: Do not arm with single read and pushbutton ON: arm With Single Read and Pushbutton

## P301E 4E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON.

### DISARM WITH ACCESS CARD

When this option is enabled a valid access card will disarm the panel. (It will perform the same function as a keypad code + E or a radio key off button).

**PROGRAMMING SEQUENCE:**

**P301E 4E** *toggles the option ON and OFF*

OFF: Do not disarm with access card ON: disarm with access card

## P301E 5E–7E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
OFF.

**NOTES**
- When one of these options is enabled, that zone is automatically disabled as an alarm zone.
- The zone must reseal before another request to exit can occur. i.e, If the zone is left unsealed, the door will not be left unlocked.

**RELATED OPTIONS**
P37E, P38E Long Response zones

P318E, P328E, P338E, P121E–P124E Programming of readers to AUX outputs.

### REQUEST TO EXIT (REX) INPUTS

These options convert zones 5, 6 and 7 into Request To Exit (REX) inputs for access control, allowing for push button door exit. Connect a N/C or N/O pushbutton to either open circuit or short circuit the zone resistor.

The REX zones can also be programmed as Long Response zones (P37E, P38E) to prevent accidental door opening, the REX button must be pressed and held for 1 sec or 3 sec, as programmed.

P301E 5E enables zone 5 to trigger the AUX outputs assigned to reader1.

P301E 6E enables zone 6 to trigger the AUX outputs assigned to reader2.

P301E 7E enables zone 7 to trigger the AUX outputs assigned to reader3.

**PROGRAMMING SEQUENCE:**

**P301E 5E, 6E or 7E** *toggles the option ON and OFF*

OFF: The zone is a normal alarm zone
ON: The zone is a REX input

## P301E 8E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
ON.

### STROBE FLASH ON READER ARMING/DISARMING

When option ON, strobe will flash with reader arm/disarm.

**PROGRAMMING SEQUENCE:**

**P301E 8E** *toggles the option ON and OFF*

| Option No. | Description | ZONES 1–8 (5400) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | ZONES 9–16 (5400/16CB) 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P303E | DOTL ZONES | | | | | | | | | | | | | | | | |

## P303E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
All OFF: No DOTL zones.

**NOTES**
- zones can be assigned as DOTL zones in addition to normal alarm functions. Therefore, DOTL zones can operate as alarm zones when armed and DOTL zones when disarmed. (Day zone programming still applies.)

### DOOR OPEN TOO LONG (DOTL) ZONES

This selects the zones that will generate a DOTL alert if the zone is unsealed for longer than the time set by P304E.

The types of alerts are set by P121E 7E, P122E 7E and P305E.

**PROGRAMMING SEQUENCE:**

**P303E 1E–16E** *toggles the options ON and OFF*

OFF: DOTL is disabled for that zone
ON: DOTL is enabled for that zone

| Option No. | Description | Default | Note |
|---|---|---|---|
| P304E | DOTL TIME | 20 | 01–99 seconds |

## P304E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**FACTORY DEFAULT**
20 seconds.

### DOTL TIME

Sets the delay time in seconds before a DOTL zone generates a DOTL alert. Enter a value between 01 and 99.

**PROGRAMMING SEQUENCE:**

**P304E** *existing DOTL time is displayed one digit at a time*
**[ENTER NEW VALUE] E** *new value is displayed one digit at a time*

| Option No. | Description | DOTL output LATCHES 1E | DOTL outputs to Output Expnader 2E | 3E | 4E | DOTL outputs flashes on keypad 5E | 6E | 7E | 8E |
|---|---|---|---|---|---|---|---|---|---|
| P305E | DOTL ALERTS | | | | | | | | |

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**PROGRAMMING SEQUENCE:**

**P305E [1E–8E]** *toggles the options ON and OFF*

## P305E 1E

**RELATED OPTIONS**
P121E 7E DOTL Alerts to AUX1.
P122E 7E DOTL Alerts to AUX2.

### DOTL OUTPUT LATCHES

With this option on, DOTL alerts will either follow the sealed/unsealed state of DOTL zones or latch the AUX output/s which have been programmed for DOTL alerts.

1E OFF: DOTL outputs follow the state of DOTL zones set by P303E (Factory default).
1E ON: DOTL outputs latch on until reset by disarming the panel.

## P305E 2E

**RELATED OPTIONS**
P117E 1E Enable output expander.

### DOTL ALERTS TO OUTPUT EXPANDER

With this option on, DOTL alerts will be sent to the optional output expander on the same output number as the DOTL zone number. P305E 1E settings apply.

2E OFF: No DOTL alerts to the output expander, (factory default).
2E ON: DOTL alerts sent to the output expander.

## P305E 5E

### DOTL ALERTS TO KEYPAD

With this option on, DOTL alerts will SLOWLY Flash the corresponding zone light on the keypad. P305E 1E settings apply.

5E OFF: No DOTL alerts to the keypad, (factory default).
5E ON: DOTL alerts slow flash zone lights on the keypad.

| Option No. | Description | reader 1 to **AUX1** **1E** | reader 1 to **AUX2** **2E** | reader 1 to **AUX3** **3E** | reader 1 to **AUX4** **4E** |
|---|---|---|---|---|---|
| P318E | READER 1 TO AUX OUTPUTS | | | | |

| Option No. | Description | reader 2 to **AUX1** **1E** | reader 2 to **AUX2** **2E** | reader 2 to **AUX3** **3E** | reader 2 to **AUX4** **4E** |
|---|---|---|---|---|---|
| P328E | READER 2 TO AUX OUTPUTS | | | | |

| Option No. | Description | reader 3 to **AUX1** **1E** | reader 3 to **AUX2** **2E** | reader 3 to **AUX3** **3E** | reader 3 to **AUX4** **4E** |
|---|---|---|---|---|---|
| P338E | READER 3 TO AUX OUTPUTS | | | | |

| Option No. | Description | Default | Note |
|---|---|---|---|
| P319E | READER 1 OUTPUT TIME | 5 | 01–24 sec |
| P329E | READER 2 OUTPUT TIME | 5 | 01–24 sec |
| P339E | READER 3 OUTPUT TIME | 5 | 01–24 sec |

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**PROGRAMMING SEQUENCE:**

**P338E [1E–4E]** *toggles the options ON and OFF*

**READERS 1–3 to AUX OUTPUTS 1–4**

These options give the flexiblity of assigning any access reader to any AUX output for operating door strikes, magnetic locks, etc. Readers can be assigned to multiple outputs. Always use an external relay board on each AUX output if connecting devices which draw more than 100mA.

## P318E 1E–4E

**RELATED OPTIONS**
P121E 8E, P122E 8E, P123E 8E, P124E 8E, P319E, P329E, P339E.

**P318E [1E–4E]** *Toggles the options.*

1E ON: Reader 1 output to **AUX1** (P121E 8E must also be on).
2E ON: Reader 1 output to **AUX2** (P122E 8E must also be on).
3E ON: Reader 1 output to **AUX3** (P123E 8E must also be on).
4E ON: Reader 1 output to **AUX4** (P124E 8E must also be on).

## P328E 1E–4E

**RELATED OPTIONS**
P121E 8E, P122E 8E, P123E 8E, P124E 8E, P319E, P329E, P339E.

**P328E [1E–4E]** *Toggles the options.*

1E ON: Reader 2 output to **AUX1** (P121E 8E must also be on).
2E ON: Reader 2 output to **AUX2** (P122E 8E must also be on).
3E ON: Reader 2 output to **AUX3** (P123E 8E must also be on).
4E ON: Reader 2 output to **AUX4** (P124E 8E must also be on).

## P338E 1E–4E

**RELATED OPTIONS**
P121E 8E, P122E 8E, P123E 8E, P124E 8E, P319E, P329E, P339E.

**P338E [1E–4E]** *Toggles the options.*

1E ON: Reader 3 output to **AUX1** (P121E 8E must also be on).
2E ON: Reader 3 output to **AUX2** (P122E 8E must also be on).
3E ON: Reader 3 output to **AUX3** (P123E 8E must also be on).
4E ON: Reader 3 output to **AUX4** (P124E 8E must also be on).

## P319E, P329E, P339E

**PROGRAM MODE LEVEL**
Installer, remote by PC.

**RELATED OPTIONS**
P318E, P328E, P338E.

**READERS 1–3 OUTPUT TIME**

This sets the time that the outputs selected by P318E, P328E and P338E are ON. Range 1-24 seconds.

**PROGRAMMING SEQUENCE:**

**P319E, P329E** or **P339E** *existing reader output time is displayed one digit at a time*
**[ENTER NEW VALUE] E** *new value is displayed one digit at a time*

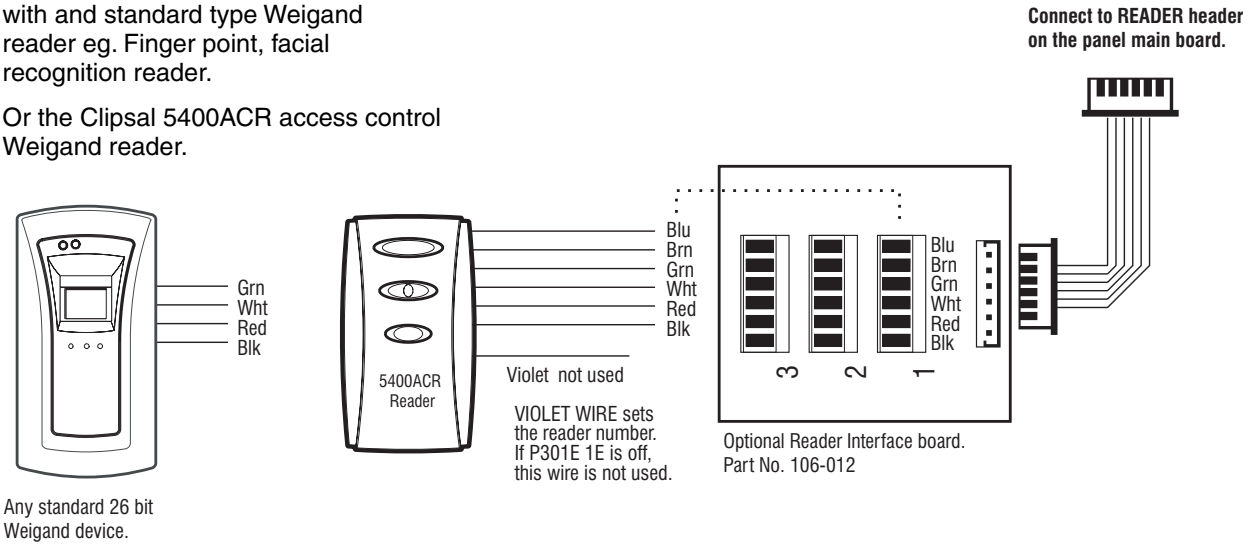
**WIRING A SINGLE reader**

P301E 1E is OFF (reader addresses not used).

Connect only 1 reader.

In this mode the panel is compatible with and standard type Weigand reader eg. Finger point, facial recognition reader.

Or the Clipsal 5400ACR access control Weigand reader.

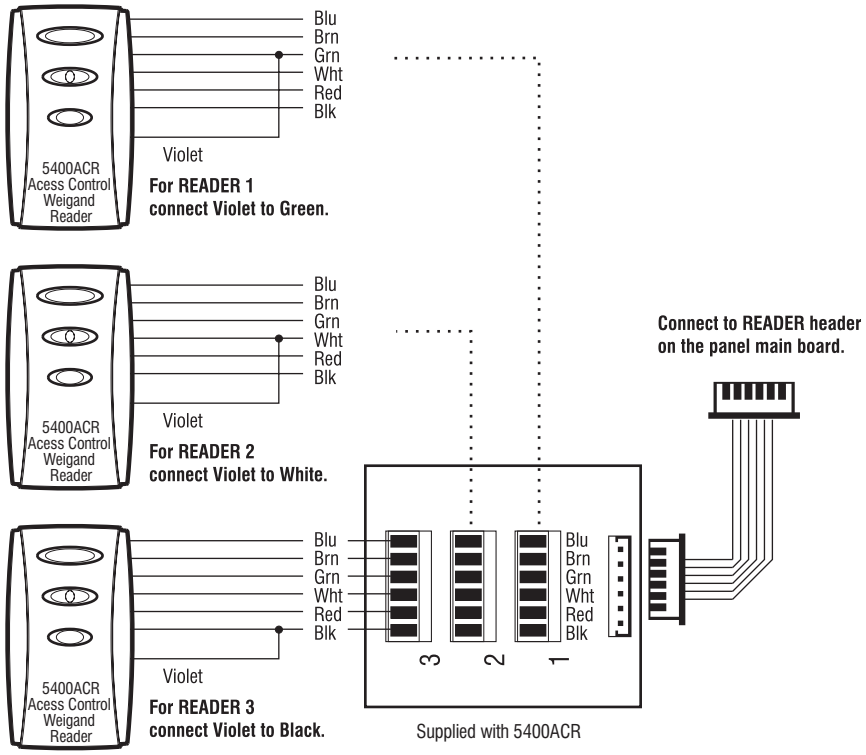



**WIRING MULTIPLE reader**

P301E 1E is ON (use reader addresses).

When multiple readers are used, the panel needs to identify the individual readers.

The Clipsal 5400ACR access control Weigand readers can be addressed as reader 1, 2 or 3 by connecting the violet wire to an appropriate terminal.




If using multiple Weigand readers, they must be either ALL addressable or ALL non-addressable.

That is, use either three Clipsal 5400ACR addressable Weigand readers or three generic Weigand readers.

For longer cable runs use twisted 3 pair shielded cable with only one end of the shield connected to ground.

**CENTRAL STATION MONITORING**

**AUDIBLE MONITORING**

AUDIBLE MONITORING
REPORTING FORMAT TABLE

| DIGIT A | DIGIT B | ALARM |
|---|---|---|
| 1 | - | Zone1 |
| 2 | - | Zone2 |
| 3 | - | Zone3 |
| 4 | - | Zone4 |
| 5 | - | Zone5 |
| 6 | - | Zone6 |
| 7 | - | Zone7 |
| 8 | - | Zone8 |
| 9 | - | Zone9 |
| 1 | 0 | Zone 10 |
| 1 | 1 | Zone 11 |
| 1 | 2 | Zone 12 |
| 1 | 3 | Zone 13 |
| 1 | 4 | Zone 14 |
| 1 | 5 | Zone 15 |
| 1 | 6 | Zone 16 |
| 2 | 1 | Duress |
| 2 | 2 | KeyswitchTamper/Panic |
| 2 | 3 | Keypad Panic |
| 2 | 4 | Radio Panic |
| 2 | 5 | Medical alarm |
| 2 | 6 | Fire alarm |
| 2 | 7 | Exit from installer program mode |
| 3 | 1 | External Tamper |
| 3 | 2 | Internal Panel Tamper |
| 3 | 3 | KeypadTamper |
| 3 | 4 | RadioTamper |
| 3 | 5 | MainsFail |
| 3 | 6 | Panel Battery Fail |
| 4 | 1 | RADIO Battery Fail |
| 4 | 2 | RADIO Supervision Fail |

## CENTRAL STATION MONITORING

The Clipsal 5400 and 5400/16CB control panels have an on-board digital dialler which can send detailed alarm messages to a central monitoring station.

The digital messages can include information about the zone/s which caused the alarm, tamper alarms, low battery or mains failure reports, and it can also (by user number) identify the users who arm and disarm the system.

Central station monitoring is highly recommended and is the most effective method of monitoring your alarm system.

installers are welcome to contact Clipsal for further information about monitoring.

## AUDIBLE MONITORING

While central station monitoring is recommended, the panel can also send audible alarm reports to any DTMF capable telephone. The types of alarms sent are listed in the reporting format table.

The basic audible message takes the form of:

**N** [pause] **A** [pause] **B** [pause]

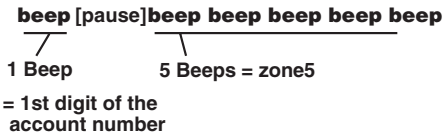
**N** = The first digit of the account number, P72E.
*(**N** can be the digits 1–9. If P72E starts with 0, **N** is not sent).*

**A** = First digit of the alarm identifier (see reporting format table).

**B** = Second digit of the alarm identifier (see reporting format table).

### MESSAGE EXAMPLE (AUDIBLE PULSE FORMAT P86E 4E)

If the Account Number is 1234 and zone 5 alarm is reported:




### REPORTING SEQUENCE

When triggered by an alarm event the panel will call the primary telephone number (or the 'follow me' telephone number, if programmed) and at the end of the dialling of the last digit, it will wait for 5 seconds and then commence the audible message. The audible message will continue to repeat for 45 seconds or until it is kissed off by a DTMF tone.

If there is more than one alarm message to transmit then after it has received the kiss-off/ acknowledge tone it will commence transmission of the next message. The panel will continue to do this until all alarm messages are transmitted and kissed-off.

### ACKNOWLEDGE TONE

The person receiving the call can then acknowledge the alarm by pressing the [#] key on their telephone. Press the [#] key for 2 seconds during pauses in the audible message.
(On mobile phones, press the [#] key in short bursts. Many mobile phones enter sub-menus if the [#] key is pressed continuously).

If the alarm is not acknowledged, the keypad's LINE light will flash continuously until the panel is next armed.

### ALARM EVENTS SENT

The reporting format table identifies the alarm events which can be programmed to be sent in audible format.

open/close reports, restorals and exclusions (Isolates) are NOT sent in audible format, even if selected on.

## AUDIBLE FEEDBACK

| | |
|---|---|
| 3 beeps | • The user code is valid<br>• Successful arming or disarming<br>• An AUXiliary output has been turned ON. |
| 1 long beep | • Panel is already armed<br>• Invalid code. Try again. |
| 1 short beep | • An AUXiliary output has been turned OFF. |

## SUMMARY OF TELEPHONE COMMANDS

| | |
|---|---|
| 0 | Prepare to receive commands |
| 1 # | Arm areas |
| 2 # | Disarm areas |
| 3 # | Turn AUX 1 Output ON or OFF |
| 4 # | Turn AUX 2 Output ON or OFF |
| 5 # | Turn AUX 3 Output ON or OFF |
| 6 # | Turn AUX 4 Output ON or OFF |
| * # | Finished – hang up |

The Clipsal 5400/5400/16CB will allow a user to call into the panel, using a standard DTMF telephone, and remotely arm or disarm all areas and also turn on or off AUX outputs 1, 2, 3 or 2.

To maintain panel security, remote operations can only be activated after entering a valid user code.

To operate the panel by telephone, you need a DTMF capable telephone, a valid user code and you must know the telephone number of the line to which the panel is connected.

### NOTES

- If the panel does not receive commands for periods longer than 10 seconds it will assume that the call is finished and it will hang up.
- If an alarm occurs which requires the panel to dial out while attempting remote control, the panel will treat the alarm as a priority, give a constant tone as a warning and then hang up.
- When all remote control commands are finished press * # to force the panel to hang up.

## SEQUENCE OF OPERATION

1. Phone the panel telephone number and listen for the required number of rings (ring ring...ring ring) and then hang up.
2. Wait 10 seconds and then call the number again within 50 seconds.
3. The panel will answer the second call immediately, sound a beep for 2 seconds then, after a pause it will sound a lower frequency tone. The panel is now ready to receive telephone commands.
4. Press the 0 button on the telephone. This tells the panel that telephone commands will follow. The panel will respond with either 3 beeps if all OK (one long beep means try again).
5. Enter a valid user code (that is normally used for arming or disarming the panel) followed by the # button.
   The panel will respond with 3 beeps if it recognises the code or 1 long beep to signal the code was invalid and to try again.
6. Enter the required command. See summary of telephone commands.
7. Press * # to finish. This tells the panel to hang up. Hang up your telephone.

| USER CODE OPTIONS TABLE | | | Page 13 | | | | Pg 62 | Page 63 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| USER CODE | OPTION NO. u | KEYPAD PIN | 1E AREA 1 CODE | 2E AREA 2 CODE | 3E ARM ONLY | 4E "CODE ONLY" ARM | 5E RADIO CODE | 6E reader code 1 | 7E reader code 2 | 8E reader code 3 |
| 1 (Master) | P201E | 123 | ON | | | | | | | |
| 2 | P202E | | ON | | | | | | | |
| 3 | P203E | | ON | | | | | | | |
| 4 | P204E | | ON | | | | | | | |
| 5 | P205E | | ON | | | | | | | |
| 6 | P206E | | ON | | | | | | | |
| 7 | P207E | | ON | | | | | | | |
| 8 | P208E | | ON | | | | | | | |
| 9 | P209E | | ON | | | | | | | |
| 10 | P210E | | ON | | | | | | | |
| 11 | P211E | | ON | | | | | | | |
| 12 | P212E | | ON | | | | | | | |
| 13 | P213E | | ON | | | | | | | |
| 14 | P214E | | ON | | | | | | | |
| 15 | P215E | | ON | | | | | | | |
| 16 | P216E | | ON | | | | | | | |
| 17 | P217E | | ON | | | | | | | |
| 18 | P218E | | ON | | | | | | | |
| 19 | P219E | | ON | | | | | | | |
| 20 | P220E | | ON | | | | | | | |
| 21 | P221E | | ON | | | | | | | |
| 22 | P222E | | ON | | | | | | | |
| 23 | P223E | | ON | | | | | | | |
| 24 | P224E | | ON | | | | | | | |
| 25 | P225E | | ON | | | | | | | |
| 26 | P226E | | ON | | | | | | | |
| 27 | P227E | | ON | | | | | | | |
| 28 | P228E | | ON | | | | | | | |
| 29 | P229E | | ON | | | | | | | |
| 30 | P230E | | ON | | | | | | | |
| 31 | P231E | | ON | | | | | | | |
| 32 | P232E | | ON | | | | | | | |
| 33 | P233E | | ON | | | | | | | |
| 34 | P234E | | ON | | | | | | | |
| 35 | P235E | | ON | | | | | | | |
| 36 | P236E | | ON | | | | | | | |
| 37 | P237E | | ON | | | | | | | |
| 38 | P238E | | ON | | | | | | | |
| 39 | P239E | | ON | | | | | | | |
| 40 | P240E | | ON | | | | | | | |
| 41 | P241E | | ON | | | | | | | |
| 42 | P242E | | ON | | | | | | | |
| 43 | P243E | | ON | | | | | | | |
| 44 | P244E | | ON | | | | | | | |
| 45 | P245E | | ON | | | | | | | |
| 46 | P246E | | ON | | | | | | | |
| 47 | P247E | | ON | | | | | | | |
| 48 | P248E | | ON | | | | | | | |
| 49 | P249E | | ON | | | | | | | |
| 50 | P250E | | ON | | | | | | | |
| 51 | P251E | | ON | | | | | | | |
| 52 | P252E | | ON | | | | | | | |
| 53 | P253E | | ON | | | | | | | |
| 54 | P254E | | ON | | | | | | | |
| 55 | P255E | | ON | | | | | | | |
| 56 | P256E | | ON | | | | | | | |

| OPTION | DESCRIPTION | DEFAULT | PAGE |
|---|---|---|---|
| P00E u | 'follow me' Telephone Number. | none | 38 |
| P26E u | ENTRY DELAY Time 1 | 20 sec | 15 |
| P27E u | entry delay Time 2 | 6=60 sec | |
| P28E u | EXIT DELAY Time | 60 sec | |
| P29E | SIREN RESET Time | 5 min | |
| P30E | Normal zone Sensitivity | all zones | 16 |
| P31E-36E | Vibration Sensitivity, High-Low | none | |
| P37E | Long Response zones - 1 second | none | |
| P38E | Long Response zones - 3 seconds | none | |
| P39E | double trigger zones | none | 17 |
| P40E | Instant zones | zones 3+ | |
| P41E | ENTRY DELAY 1 zones | zone 1 | |
| P42E | HANDOVER zones | zone 2 | 18 |
| P43E | entry delay 2 zones | none | |
| P44E | lockout zones (RESET output) | All zones | |
| P45E | AREA 1 zones | All zones | 18 |
| P46E | AREA 2 zones | none | |
| P51E | MONITOR MODE zones | none | 20 |
| * See page 19 for information on area operation, monitor mode & temporary day zones | | | 19 |
| P52E | 24hr zones | none | 20 |
| P53E | Day mode zones | none | |
| P54E | RESET output zones | All zones | 21 |
| P55E | STROBE zones | All zones | |
| P56E | keypad Sonalert zones | All zones | |
| P57E | SIREN zones | All zones | 22 |
| P58E | AUX1 zones | none | |
| P59E | AUX2 zones | none | |

| | | | | |
|---|---|---|---|---|
| P60E | 1E | Entry Beeps | ON | 23, 24 |
| | 2E | keyswitch monitor/disarm | OFF | |
| | 3E | keyswitch arm/disarm | OFF | |
| | 4E | tamper Siren lockout | ON | |
| | 5E | Duress to RESET output | OFF | |
| | 6E | Auto exclude zones | ON | |
| | 7E | Auto keypad display off | OFF | |
| | 8E | Delayed arm1, arm2 outputs | OFF | |
| P61E | 1E | tamper to RESET output | ON | 25 |
| | 2E | tamper to STROBE output | ON | |
| | 3E | tamper to keypad Sonalert | ON | |
| | 4E | tamper to SIREN output | ON | |
| | 5E | keypad Panic to RESET output | ON | |
| | 6E | keypad Panic to STROBE output | ON | |
| | 7E | keypad Panic to Sonalert | ON | |
| | 8E | keypad Panic to SIREN output | ON | |
| P62E | 1E | Shortcut Memory display | ON | 26 |
| | 2E | Shortcut zone exclude | ON | |
| | 3E | Shortcut monitor mode | ON | |
| | 4E | Shortcut keypad Panic | OFF | |
| | 5E | Shortcut area1 arming | ON | |
| | 6E | Shortcut area 2 arming | OFF | |
| | 7E | Brief warning on Auto exclude | ON | |
| | 8E | exit time x10 | OFF | |

u options marked "u" can be programmed in user Program mode

u *All* options can be programmed in installer Program mode

## PROGRAMMING OPTIONS SUMMARY

| OPTION | | DESCRIPTION | DEFAULT | PAGE |
|---|---|---|---|---|
| P63E | 1E | monitor alarms to RESET output | ON | 27 |
| | 2E | monitor alarms to STROBE | ON | |
| | 3E | monitor alarms to SONALERT | OFF | |
| | 4E | monitor alarms to SIREN | OFF | |
| | 5E | Day mode to RESET output | ON | |
| | 6E | Day mode to STROBE | ON | |
| | 7E | Day mode to keypad SONALERT | OFF | |
| | 8E | Day mode to SIREN | OFF | |
| P64E | 1E | Brief monitor alarm | OFF | 28, 29 |
| | 2E | brief day alarm | OFF | |
| | 3E | monitor zones entry delay2 | ON | |
| | 4E | radio key SIREN CHIRPS | OFF | |
| | 5E | 50Hz Mains Frequency | ON | |
| | 6E | Double key keypad Panic | ON | |
| | 7E | keypad fire alarm | OFF | |
| | 8E | keypad medical alarm | OFF | |
| P65E | | supervised radio zones | NONE | 30 |
| P66E | 1E | radio supervision alarm to RESET o/p | OFF | 31, 32 |
| | 2E | radio supervision alarm to STROBE | OFF | |
| | 3E | radio supervision alarm to SONALERT | OFF | |
| | 4E | radio supervision alarm to SIREN | OFF | |
| | 5E | [not used] | OFF | |
| | 6E | [not used] | OFF | |
| | 7E | radio supervision speedup x 6 | OFF | |
| | 8E | radio supervision speedup x 10 | OFF | |
| P67 | | radio supervision Time | 24 (hours) | 30 |
| P68E | 1E | Enable zone Split (D16 only) | OFF | 33 |
| | 2E | 3K3 zone Resistors | OFF | 34 |
| | 3E | [not used] | OFF | |
| | 4E | [not used] | OFF | |
| | 5E | radio arming “unsealed” warning | OFF | |
| | 6E | 24hr zone Fire Siren sound | OFF | |
| | 7E | [not used] | OFF | |
| | 8E | Quiet chirps on radio arm/disarm | OFF | |
| P69E | 1E | ARM1 output pulses | OFF | 35,36 |
| | 2E | ARM2 output pulses | OFF | |
| | 3E | Quiet monitor Siren | OFF | |
| | 4E | 6 beeps on arming | OFF | |
| | 5E | radio key arming of monitor mode | OFF | |
| | 6E | Disable Mains Fail alarm | OFF | |
| | 7E | [not used] | OFF | |
| | 8E | [not used] | OFF | |
| P70E | | TELEPHONE NO.1 Primary | NONE | 37 |
| P71E | | Telephone No.2 Secondary | NONE | |
| P72E | | ACCOUNT NO. 1 | 0000 | |
| P73E | | Account No. 2 | 0000 | |
| P74E | | REPORT ZONE ALARMS | All zones | 39 |
| P75E 16 & 8 ZONE PANEL | 1E | Report DURESS alarms | OFF | 40 |
| | 2E | Report MEDICAL alarms | OFF | |
| | 3E | Report keypad & keyswitch PANIC | ON | |
| | 4E | Report FIRE alarms | OFF | |
| | 5E | Report PANEL TAMPER alarms | ON | |
| | 6E | Report EXTERNAL TAMPER alarms | ON | |
| | 7E | Report KEYPAD TAMPER alarms | ON | |
| | 8E | Report EXIT FROM INSTALLER mode | OFF | |

| OPTION | | DESCRIPTION | DEFAULT | PAGE |
|---|---|---|---|---|
| D8 = 5400 D16 = 5400/16CB ALT - 16 ZONE, 8 ZONE | | Report RADIO TAMPER | ON | 39 |
| | | Report RADIO PANIC by user ID | ON | |
| | | Report RADIO LOW BATTERY by device | OFF | |
| | | Report RADIO SUPERVISION FAIL | OFF | |
| | | Report PANEL LOW BATTERY | ON | |
| | | Report MAINS FAIL | ON | |
| P76E | | Report zone restorals | All on | 38 |
| P77E | | Report Misc. restorals | All on | 40 |
| P78E | | Report Multiple zone alarms | NONE | 39 |
| P79E | | Account No.2 zones | NONE | 39 |
| P80E | | Tel No. 3 for Test Calls | NONE | 37 |
| P81E | | Tel No.4 Callback | NONE | |
| P82E | 1E | Send RESTORAL report immediately | OFF | 39 |
| | 2E | Send RESTORAL after siren time | OFF | |
| | 3E | Send RESTORAL after disarm & seal | OFF | |
| | 4E | Send RESTORAL after disarm always | ON | |
| P83E | | TEST CALL Interval | 84 (168hrs) | 41 |
| P84E | | Time before FIRST TEST CALL | 6 (12hrs) | |
| P85E | 1E | Auto Dialling, Pulse & DTMF | OFF | 41 |
| | 2E | DTMF Dialling (Decadic) always | OFF | |
| | 3E | DTMF Dialling always | ON | |
| P86E | 1E | Disable Dialler | OFF | 42, 43 |
| | 2E | CONTACT ID FORMAT | ON | |
| | 3E | audible DTMF format | OFF | |
| | 4E | audible PULSE Format | OFF | |
| | 5E | Contact ID + audible DTMF | OFF | |
| | 6E | Contact ID + audible PULSE | OFF | |
| P87E | 1E | Split dial Primary/Secondary numbers | OFF | 44 |
| | 2E | Check for Dial Tone | ON | |
| | 3E | [not used] | OFF | |
| | 4E | 4 Dialling attempts | ON | |
| P88E | 1E | Send AREA 1 OPEN/CLOSE REPORTS | OFF | 45, 46 |
| | 2E | Send AREA 2 open/close reports | OFF | |
| | 3E | Siren Chirp on Kiss-off | OFF | |
| | 4E | Flash strobe on Kiss-off | OFF | |
| | 5E | Forced Opening report | ON | |
| | 6E | Delayed Closing Reports | OFF | |
| | 7E | Manual exclude Reports | ON | |
| | 8E | Auto exclude Reports | ON | |
| P89E | 1E | ENABLE TEST CALLS | ON | 47, 48 |
| | 2E | Mains Report Delay (1 hour) | ON | |
| | 3E | Listen-In to Dialler | OFF | |
| | 4E | Swinger shutdown | ON | |
| | 5E | Line Fault monitor | OFF | |
| | 6E | [not used] | | |
| | 7E | Use Internal Timing | OFF | |
| | 8E | [not used] | | |
| P90E | 1E | Enable remote access | OFF | 49, 50 |
| | 2E | Enable First Call mode | OFF | |
| | 3E | Enable remote arming | OFF | |
| | 4E | Enable remote disarming | OFF | |
| | 5E | Enable remote AUX control | OFF | |
| | 6E | Enable remote Status report | OFF | |
| | 7E | Enable remote Event Report | OFF | |
| | 8E | Enable Callback mode | OFF | |

| OPTION | DESCRIPTION | DEFAULT | PAGE |
|---|---|---|---|
| **P91E** | Required rings to answer | 1 | 51 |
| **P93E** | Report Misc. restorals 9-14 (D8 only) | All on | |
| **P94E** | “No Memory Warning” zones | none | 51 |
| **P95E** | CLEAR RADIO DEVICES | | 52 |
| **P96E** | CLEAR MEMORY | | |
| **P97E** | CLEAR PANEL OPTIONS (restore Factory Defaults) | | |
| **P98E** | CLEAR user codes, radio keys, access Cards | | |
| **P99E** | Program the INSTALLER CODE | 000000 | 52 |
| **P101E-P116E** | PROGRAM RADIO DEVICES 1–8 or 1–16 | none | 61 |
| **P117E** 1E | Enable output expander | OFF | 53, 54 |
| 2E | Alternate Expander Format | OFF | |
| 3E | day zone Follower | OFF | |
| 4E | Output exclude | OFF | |
| **P118E** | output expander zones | none | |
| **P119E** | output expander alarm zones | none | |
| **P120E** 1E | Latched keyswitch input | OFF | 55 |
| 2E | monitor arm Chirps | OFF | |
| 3E | radio key AUX arms monitor mode | OFF | |
| 4E | keyswitch DISARM ONLY | OFF | |
| 5E | keyswitch ARM ONLY | OFF | |
| 6E | smart beeps (Brief monitor & Day modes) | OFF | |
| **P121E** 1E | zone alarms to AUX1 (P58E selects zones) | ON | 56 |
| 2E | zone supervision alarms to AUX1 | OFF | |
| 3E | radio key Panic TOGGLE | OFF | |
| 4E | radio key Panic PULSE | OFF | |
| 5E | [not used] | OFF | |
| 6E | Enable telephone remote control of AUX1 | OFF | |
| 7E | Door Open Too Long (DOTL) alarm to AUX1 | OFF | |
| 8E | reader [x] output pulses AUX1 | OFF | |
| **P122E** 1E | zone alarms to AUX2 (P59E selects zones) | ON | 57 |
| 2E | zone supervision alarms to AUX2 | OFF | |
| 3E | radio key AUX Button TOGGLE | OFF | |
| 4E | radio key AUX Button PULSE | OFF | |
| 5E | Telephone Line fault to AUX2 | OFF | |
| 6E | Enable phone remote control of AUX2 | OFF | |
| 7E | Door Open Too Long (DOTL) alarm to AUX2 | OFF | |
| 8E | reader [x] output pulses AUX2 | OFF | |
| **P123E** 1E | area 1 armed output to AUX3 | ON | 58 |
| 6E | Enable telephone remote control of AUX3 | OFF | |
| 8E | reader [x] output pulses AUX3 | OFF | |
| **P124E** 1E | area 2 armed output to AUX4 | ON | 58 |
| 2E | Enable Extension Sonalert | | |
| 6E | Enable telephone remote control of AUX4 | OFF | |
| 8E | reader [x] output pulses AUX4 | OFF | |
| **P125E** | Enable hardwired zones | All on | 59 |
| **P130E** | Real time clock set MINUTES | 00 | 64 |
| **P131E** | Real time clock set HOURS | 00 | |
| **P132E** | Real time clock set DAY | 01 | |
| **P133E** | Real time clock set MONTH | 01 | |
| **P134E** | Real time clock set YEAR | 04 | |
| **P135E** | Real time clock set DAY OF WEEK | 1 | |

| OPTION | DESCRIPTION | DEFAULT | PAGE |
|---|---|---|---|
| **ACCESS CONTROL OPTIONS** | | | |
| **P300E** | DEFAULT ALL ACCESS CONTROL OPTIONS | | 65 |
| **P301E** 1E | Use reader addresses | OFF | |
| 2E | arm with double read | OFF | |
| 3E | arm with single read and pushbutton | OFF | |
| 4E | disarm with access card | ON | |
| 5E | REX Input 1 (zone 5 input) | OFF | |
| 6E | REX Input 2 (zone 6 input) | OFF | |
| 7E | REX Input 3 (zone 7 input) | OFF | |
| **P303E** | DOTL zones | none | 66 |
| **P304E** | DOTL time | 20 sec | |
| **P305E** 1E | DOTL output LATCHES | OFF | |
| 2E | DOTL outputs to output expander | OFF | |
| 3E | [not used] | | |
| 4E | [not used] | | |
| 5E | DOTL zone flashes on keypad | OFF | |
| **AUX OUTPUTS** | | | |
| **P318E** 1E | Ultraprox reader1 to AUX1 | OFF | 67 |
| 2E | Ultraprox reader1 to AUX2 | OFF | |
| 3E | Ultraprox reader1 to AUX3 | OFF | |
| 4E | Ultraprox reader1 to AUX4 | OFF | |
| **P319E** | Ultraprox reader1 output TIME | 5 sec | |
| **P328E** 1E | Ultraprox reader2 to AUX1 | OFF | |
| 2E | Ultraprox reader2 to AUX2 | OFF | |
| 3E | Ultraprox reader2 to AUX3 | OFF | |
| 4E | Ultraprox reader2 to AUX4 | OFF | |
| **P329E** | Ultraprox reader2 output TIME | 5 sec | |
| **P338E** 1E | Ultraprox reader3 to AUX1 | OFF | |
| 2E | Ultraprox reader3 to AUX2 | OFF | |
| 3E | Ultraprox reader3 to AUX3 | OFF | |
| 4E | Ultraprox reader3 to AUX4 | OFF | |
| **P339E** | Ultraprox reader3 output TIME | 5 sec | |

# INSTALLATION RECORD

## CLIPSAL 5400/5400/16CB
## HomeSafe Security Panel

☐ **CLIPSAL 5400/ ALARM CONTROL PANEL**

☐ **CLIPSAL 5400/16CB ALARM CONTROL PANEL**

| | |
|---|---|
| DATE PURCHASED: | DATE INSTALLED: |
| INSTALLATION COMPANY: | |
| TELEPHONE: | |
| MONITORING COMPANY: | |
| TELEPHONE: | |

| | | |
|---|---|---|
| **P26E** ENTRY DELAY TIME 1 | | Seconds |
| **P27E** ENTRY DELAY TIME 2 | | Seconds |
| **P28E** EXIT DELAY TIME | | Seconds |
| **P29E** SIREN RESET TIME | | Minutes |

| | ZONES | DEVICE TYPE PIR, Reed switch, etc | DESCRIPTION Entrance, bedroom1, etc | ZONE ASSIGNMENT | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **P41E** ENTRY DELAY 1 | **P43E** ENTRY DELAY 2 | **P42E** HANDOVER | **P40E** INSTANT | **P45E** AREA 1 | **P46E** AREA 2 | **P51E** MONITOR | **P52E** 24 HOUR | **P54E** RESET OUTPUT | **P55E** STROBE OUTPUT | **P56E** SONALERT OUTPUT | **P57E** SIREN OUTPUT | **P74E** Report (dialler) |
| 5400 | 1 | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | |
| | 4 | | | | | | | | | | | | | | | |
| | 5 | | | | | | | | | | | | | | | |
| | 6 | | | | | | | | | | | | | | | |
| | 7 | | | | | | | | | | | | | | | |
| | 8 | | | | | | | | | | | | | | | |
| 5400/16CB | 9 | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | |
| | 12 | | | | | | | | | | | | | | | |
| | 13 | | | | | | | | | | | | | | | |
| | 14 | | | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | | | | | | |
| | 16 | | | | | | | | | | | | | | | |

| USER CODE | OPTION No | Extra Options Assigned E.g. Radio Code, Arm Only, etc. |
|---|---|---|
| 1 Master Code | P201E | |
| 2 | P202E | |
| 3 | P203E | |
| 4 | P204E | |
| 5 | P205E | |
| 6 | P206E | |
| 7 | P207E | |
| 8 | P208E | |
| 9 | P209E | |
| 10 | P210E | |
| 11 | P211E | |
| 12 | P212E | |
| 13 | P213E | |
| 14 | P214E | |
| 15 | P215E | |
| 16 | P216E | |
| 17 | P217E | |
| 18 | P218E | |
| 19 | P219E | |

| USER CODE | OPTION No | Extra Options Assigned E.g. Radio Code, Arm Only, etc. |
|---|---|---|
| 20 | P220E | |
| 21 | P221E | |
| 22 | P222E | |
| 23 | P223E | |
| 24 | P224E | |
| 25 | P225E | |
| 26 | P226E | |
| 27 | P227E | |
| 28 | P228E | |
| 29 | P229E | |
| 30 | P230E | |
| 31 | P231E | |
| 32 | P232E | |
| 33 | P233E | |
| 34 | P234E | |
| 35 | P235E | |
| 36 | P236E | |
| 37 | P237E | |
| 38 | P238E | |

| USER CODE | OPTION No | Extra Options Assigned E.g. Radio Code, Arm Only, etc. |
|---|---|---|
| 39 | P239E | |
| 40 | P240E | |
| 41 | P241E | |
| 42 | P242E | |
| 43 | P243E | |
| 44 | P244E | |
| 45 | P245E | |
| 46 | P246E | |
| 47 | P247E | |
| 48 | P248E | |
| 49 | P249E | |
| 50 | P250E | |
| 51 | P251E | |
| 52 | P252E | |
| 53 | P253E | |
| 54 | P254E | |
| 55 | P255E | |
| 56 | P256E | |

CLIPSAL®
INTEGRATED SYSTEMS

**Product of**
**Clipsal Integrated Systems Pty Ltd**
Member of Clipsal Australia Holdings Group
ABN 15 089 444 931

**Head Office**
12 Park Terrace, Bowden
South Australia 5007

PO Box 103 Hindmarsh
South Australia 5007
Telephone (08) 8440 0500
International +61 8 8440 0500

Facsimile (08) 8346 0845
International +61 8 8346 0845

Internet www.clipsal.com/cis
E-Mail cis@clipsal.com.au

**CIS Technical Support Hotline:**
1300 722 247

**National Customer Service Enquiries:**
1300 2025 25

**National Customer Service Facsimile:**
1300 2025 56

**International Enquiries**

**International Sales and Marketing**
Telephone +61 8 8269 0587
Facsimile +61 8 8340 7350
E-Mail export@clipsal.com.au

**New Zealand**
Clipsal Industries (NZ) Ltd
Telephone +64 9 576 3403
Facsimile +64 9 576 1015
E-Mail headoffice@clipsal.co.nz

**Customer Service**
Free Facsimile (0508) 250 305
Auckland/Mobile Phone (09) 572 0014
Free Phone (0508) CLIPSAL
2547725

**Malaysia**
Clipsal Integrated Systems (M) Sdn Bhd
Unit 3-2, Level 3, C P Tower
No.11, Jalan 16/11, Seksyen 16,
46350 Petaling Jaya, Selangor, Malaysia
Telephone +60 3 7665 3555
Facsimile +60 3 7665 3155
E-Mail sales@cisasia.com.my

**Singapore**
Clipsal Integrated Systems Pte Ltd
5, Fourth Chin Bee Road
619 699 Singapore
Telephone +65 6415 3232/3233
Facsimile +65 6415 3289
E-Mail sales@cisasia.com.sg

International Representatives

China
Clipsal China Limited
Telephone +86 755 8237 5959

Greece
Schneider Electric AE
Telephone +30 69 4646 3200

Hong Kong
Clipsal Integrated Systems (HK) Limited
Telephone +852 2487 0261

India
Schneider Electric India Pvt Ltd
Telephone +91 11 5159 0000

Indonesia
PT Clipsal Graha Nusa
Telephone +62 21 630 6430

Korea
Clipsal Korea Co. Ltd
Telephone +822 549 5550

Pakistan
Clipsal Pakistan (Pvt) Ltd
Telephone +92 21 506 7278

Philippines
Clipsal Philippines Inc.
Telephone +632 683 0275-78

South Africa
Clipsal South Africa (Pty) Ltd
Telephone +27 11 314 5200

Taiwan
Clipsal (Taiwan) Co Ltd
Telephone +886 2 2558 3456

Thailand
Clipsal Thailand Ltd
Telephone +66 2 952 5338-42

United Arab Emirates
Clipsal Middle East
Telephone +971 6 5570 777

United Kingdom
Clipsal Integrated Systems
C/o Schneider Electric
Telephone +44 870 608 8 608

Vietnam
Clipsal - VTEC
Telephone +848 856 3002

You can find this brochure and many others online in PDF format at:
**clipsal.com**

Follow the links off the home page or access the following page directly:
**clipsal.com/wat_lib_pdf.cfm**

**clipsal.com/cis**

Clipsal Integrated Systems Pty Ltd reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in this catalogue are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein.

© Clipsal Integrated Systems Pty Ltd 2005.
All rights reserved.

This material is copyright under Australian and international laws. Except as permitted under the relevant law, no part of this work may be reproduced by any process without prior written permission of and acknowledgement to Clipsal Integrated Systems Pty Ltd.

IS1-004
CLIPADV/10316

10363475 Sept 12/05